4. ENVIRONMENTAL IMPACT ANALYSIS
C. BIOLOGICAL RESOURCES

1. INTRODUCTION

This section describes applicable regulations and biological resources that occur or have the potential to occur on the project site or in the vicinity, and presents an analysis of potential impacts to biological resources that could occur in association with implementation of the proposed project. The analysis in this section is based on information provided in the City of Newport Beach General Plan, as well as a Marine Biological Resources Assessment (MBRA) performed by Merkel & Associates (M&A) in January 2013, which is included as Appendix C of this Draft EIR.

As stated in Chapter 1, *Introduction*, of this Draft EIR, the currently proposed actions are legislative and minor administrative approvals only. No approvals which would directly allow site development are proposed at this time. Future development in accordance with the legislative approvals is addressed in this EIR, to the extent possible based on the available information. Due to the legislative approval level of detail, no Site Development Review or construction level details are available and future development is analyzed at a general level based on the development standards and design guidelines in the PCDP.

2. ENVIRONMENTAL SETTING

a. Regulatory Framework

(1) Federal Regulations

(a) Clean Water Act

The federal Water Pollution Control Act Amendments of 1972 (33 United States Code [USC] 1251–1376), as amended by the Water Quality Act of 1987, and better known as the federal Clean Water Act (CWA), is the major federal legislation governing water quality. The purpose of the federal CWA is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Discharges into waters of the United States are regulated under CWA Section 404. Waters of the United States include: 1) all navigable waters (including all waters subject to the ebb and flow of the tide); 2) all interstate waters and wetlands; 3) all other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, or natural ponds; 4) all impoundments of waters mentioned above; 5) all tributaries to waters mentioned above; 6) the territorial seas; and 7) all wetlands adjacent to waters mentioned above. Important applicable sections of the CWA are discussed below:

- Section 303 requires states to develop water quality standards for inland surface and ocean waters and submit to the U.S. Environmental Protection Agency (EPA) for approval. Under Section 303(d), the state is required to list waters that do not meet water quality standards and to develop action plans, called Total Maximum Daily Loads (TMDLs), to improve water quality.
- Section 304 provides for water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for any federal permit that proposes an activity that may result in a discharge to waters of the United States to obtain certification from the state that the discharge will

comply with other provisions of the CWA. Certification is provided by the respective Regional Water Quality Control Board (RWQCB). A Section 401 permit from the Santa Ana RWQCB would be required for the proposed project if a Section 404 permit were required.

- Section 402 establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredge or fill material) into waters of the United States. The NPDES program is administered by the RWQCB. Conformance with Section 402 is typically addressed in conjunction with water quality certification under Section 401.
    - Section 404 provides for issuance of dredge/fill permits by the United States Army Corps of Engineers (ACOE). Permits typically include conditions to minimize impacts on water quality. Common conditions include: 1) ACOE review and approval of sediment quality analysis before dredging, 2) a detailed pre- and post-construction monitoring plan that includes disposal site monitoring, and 3) requiring compensation for loss of waters of the United States. The areas of the project site that occur below mean higher high water (MHHW) would be subject to regulation under Section 404. When reviewing applications for Section 404 permits, the ACOE consults with the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) for compliance with the federal Endangered Species Act (ESA, see discussion below) when a project may affect a federally listed species.

(b) Rivers and Harbors Appropriation Act

The Rivers and Harbors Appropriation Act of 1899 (33 USC 403), commonly known as the Rivers and Harbors Act (R&H), prohibits the construction of any bridge, dam, dike, or causeway over or in navigable waterways of the United States without congressional approval. Under R&H Section 10, the ACOE is authorized to permit structures in navigable waters. Building or modifying wharves, piers, jetties, and other structures in or over the waters, that may affect the navigable capacity of the Newport coastline requires ACOE approval through the Section 10 permit process. When reviewing applications for Section 10 permits, the ACOE consults with the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) for compliance with the federal Endangered Species Act (ESA, see discussion below) when a project may affect a federally listed species.

(c) Endangered Species Act

The federal Endangered Species Act (ESA) protects plants and wildlife that are listed as endangered or threatened by the USFWS and NMFS. ESA Section 9 prohibits the taking of endangered wildlife, where taking is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land, as well as removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law. Under ESA Section 7, agencies are required to consult with the USFWS or NMFS if their actions, including permit approvals or funding, could adversely affect an endangered species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS or NMFS may issue an incidental take statement allowing take of the species that is incidental to another authorized activity, provided the action will not jeopardize the continued existence of the species. In cases where the federal agency determines its action may affect, but would be unlikely to adversely affect, a federally listed species, the agency informally consults with the USFWS and/or NMFS. This informal consultation typically involves incorporating measures intended to ensure effects would not be adverse. Concurrence from the USFWS and/or NMFS concludes the informal process.

(d) Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act of 1976 was established to promote domestic and commercial fishing under sound conservation and management principles. The NMFS, as a branch of the National Oceanic and Atmospheric Administration (NOAA), implements the Act via eight regional fisheries management councils (FMCs). The FMCs in turn prepare and implement fishery management plans (FMPs) in accordance with local conditions. The Pacific FMC is responsible for the Pacific region, in which the project site is located. The FMPs also establish Essential Fish Habitat (EFH) for the species they manage and require consultation with NMFS for actions that may adversely affect EFH. Following receipt of an EFH, NMFS provides EFH Conservation Recommendations to the lead agency detailing measures that may be taken by the agency to conserve EFH. Within 30 days of receipt of EFH Conservation Recommendation, the project lead agency must respond in writing, including a description of measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on EFH. These measures are then incorporated into the final project design.

(e) Marine Mammal Protection Act

The Marine Mammal Protection Act of 1972 (MMPA) prohibits, with certain exceptions, the take of marine mammals in United States waters and by United States citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. The USFWS and NMFS administer the MMPA.

(f) Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) and Fish and Game Code Section 3503 protect most native bird species from destruction or harm. This protection extends to individuals as well as any part, nest, or eggs of any bird listed as migratory. Most native North American bird species are on the MBTA list. The requirements of the MBTA apply to all species on the MBTA list irrespective of geographic location, property ownership, or jurisdiction in which they are located. However, given the large number and extensive geographic range of species on the list, enforcement often is difficult. As such, in practice, federal or State resource agency permits for activities potentially impacting migratory birds may serve to implement the provisions of the MBTA, as such permits often have conditions that require pre-disturbance surveys for nesting birds, and, in the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest. The size of the buffer area varies with species and local circumstances (e.g., presence of busy roads), and is based on the professional judgment of the monitoring biologist.

(2) State Regulations

(a) California Coastal Act

The California Coastal Act (CCA) recognizes California ports, harbors, and coastline beaches as primary economic and coastal resources and as essential elements of the national maritime industry. Decisions to undertake specific development projects, where feasible, are to be based on consideration of alternative locations and designs to minimize any adverse environmental impacts. The CCA is implemented by the California Coastal Commission (CCC).

(b) California Endangered Species Act

The California Endangered Species Act (CESA) authorizes the California Fish and Game Commission (Commission) to designate endangered, threatened, and rare species and to regulate the taking of these species (California Fish and Game Code [FGC] Sections 2050–2098). The CESA defines endangered species as those whose continued existence in California is jeopardized. State-listed threatened species are those not presently facing extinction, but that may become endangered in the foreseeable future. FGC Section 2080 prohibits the taking of state-listed plants and animals. The California Department of Fish and Wildlife (CDFW, formerly the Department of Fish and Game [CDFG] prior to January 1, 2013) also designates fully protected or protected species as those that may not be taken or possessed without a permit from the Commission and/or CDFW. Species designated as fully protected or protected may or may not be listed as endangered or threatened. When a species is both state- and federally listed, an expedited request for consistency with the USFWS biological opinion may be issued through a request for Section 2080.1 consistency determination.

(c) California Fish and Game Code

The FGC is implemented by the Commission, as authorized by Article IV, Section 20, of the Constitution of the State of California. The Commission is responsible, under the provisions of Sections 200–221, for regulating the take of fish and game, not including the taking, processing, or use of fish, mollusks, crustaceans, kelp, or other aquatic plants for commercial purposes. However, the Commission does regulate aspects of commercial fishing, including fish reduction; shellfish cultivation; take of herring, lobster, sea urchins, and abalone; kelp leases; lease of state water bottoms for oyster allotments; aquaculture operations; and other activities. These resource protection responsibilities involve the setting of seasons, bag and size limits, and methods and areas of take, as well as prescribing the terms and conditions under which permits or licenses may be issued or revoked by the CDFW. The Commission also oversees the establishment of wildlife areas and ecological reserves, regulates their use, and sets policy for the CDFW.

FGC Sections 3503, 3503.5, 3505, 3800, and 3801.6 protect all native birds, birds of prey, and nongame birds, including their eggs and nests, that are not already listed as fully protected and that occur naturally within the state. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (e.g., hawks, owls, eagles, and falcons), including their nests or eggs. The CDFW is the state agency that manages native fish, wildlife, plant species, and natural communities for their ecological value and their benefits to people. The CDFW oversees the management of marine species through several programs, some in coordination with NMFS and other agencies. The Southern California Eelgrass Mitigation Policy (SCEMP) is administered by the USFWS, NMFS, and CDFW. In addition, the CDFW jointly manages (with NMFS) the implementation of the Caulerpa Control Protocol (CCP), which calls for performance of a survey for Caulerpa before any bottom-disturbing activities (*Caulerpa* is a species of algae native to tropical areas that threatens native algae species in the project area).

(d) California Common Law Public Trust

The California State Lands Commission (CSLC) has jurisdiction and management authority over all public trust lands, including ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (California Public Resources Code, §§ 6301, 6306). All tidelands and

submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

The entire project site is located landward of the adjudicated mean high tide line along the shore of Newport Bay as set in Superior Court Case #20436. The uplands at this location are within Rancho San Joaquin. These ranchos, including the project site, were confirmed into private ownership and patented by the federal government on September 19, 1867. The State is precluded from asserting its sovereign ownership interest in Rancho lands by virtue of its admission to the United States in 1850, pursuant to the decision in *Summa Corporation v. California* 466 U.S. 198 (1984). The tide and submerged lands that extend bayward of the mean high tide line are fee-owned submerged lands subject to the public navigational easement imposed by the Common Law Public Trust.

(3) Local Plans and Regulations

(a) Newport Bay Local Coastal Program

The City of Newport Beach Local Coastal Program (LCP) is not certified; however, the City does have a certified Coastal Land Use Plan and is in the process of preparing an Implementation Plan. Since the City does not have jurisdiction to issue a Coastal Development Permit (CDP), the City reviews pending development projects for consistency with the City's General Plan, Coastal Land Use Plan and Zoning regulations before an applicant can file for a CDP with the CCC.

(b) Upper Newport Bay State Marine Conservation Area

While administered by a state agency (CDFW), the Upper Newport Bay State Marine Conservation Area (MCA) and its regulations are locally specific. The submerged area (water side portion of the site) bayward of the mean high tide line and north of the East Coast Highway Bridge is currently shown within the Upper Newport Bay MCA. Except for the portion adjacent to the channel, which is county tidelands, the marina and dock areas are all private fee-owned lands. Take of all living marine resources is prohibited, with the exception of recreational take of fin fish by hook and line from shore only. Maintenance dredging, habitat restoration, research and education programs, maintenance of artificial structures, and operation and maintenance of existing facilities inside the conservation area is allowed pursuant to any required federal, state and local permits, or activities pursuant to Section 630, or as otherwise approved by the Department.

(c) Newport Beach General Plan

The City of Newport Beach General Plan contains goals and policies relevant to biological resources and the Upper Newport Bay ecosystem within the Land Use Element and Natural Resources Element. The Natural Resources Element identifies notable natural resources within the City, including Environmental Study Areas

and sensitive habitats. Figure NR-1, *Biological Resources*, in the Natural Resources Element illustrates the location of various biological resources in the area, including the location of substantial eelgrass beds, the closest of which to the project site is along the western bank of the Upper Newport Bay Channel just north of the East Coast Highway Bridge (west of Planning Area 1). Additionally, Figure NR-2, *Environmental Study Areas*, shows the location of areas with high natural resource value, including the De Anza Bayside Marsh Peninsula, which is located within Planning Area 5 (this area would not be subject to future development proposals).

b. Existing Conditions

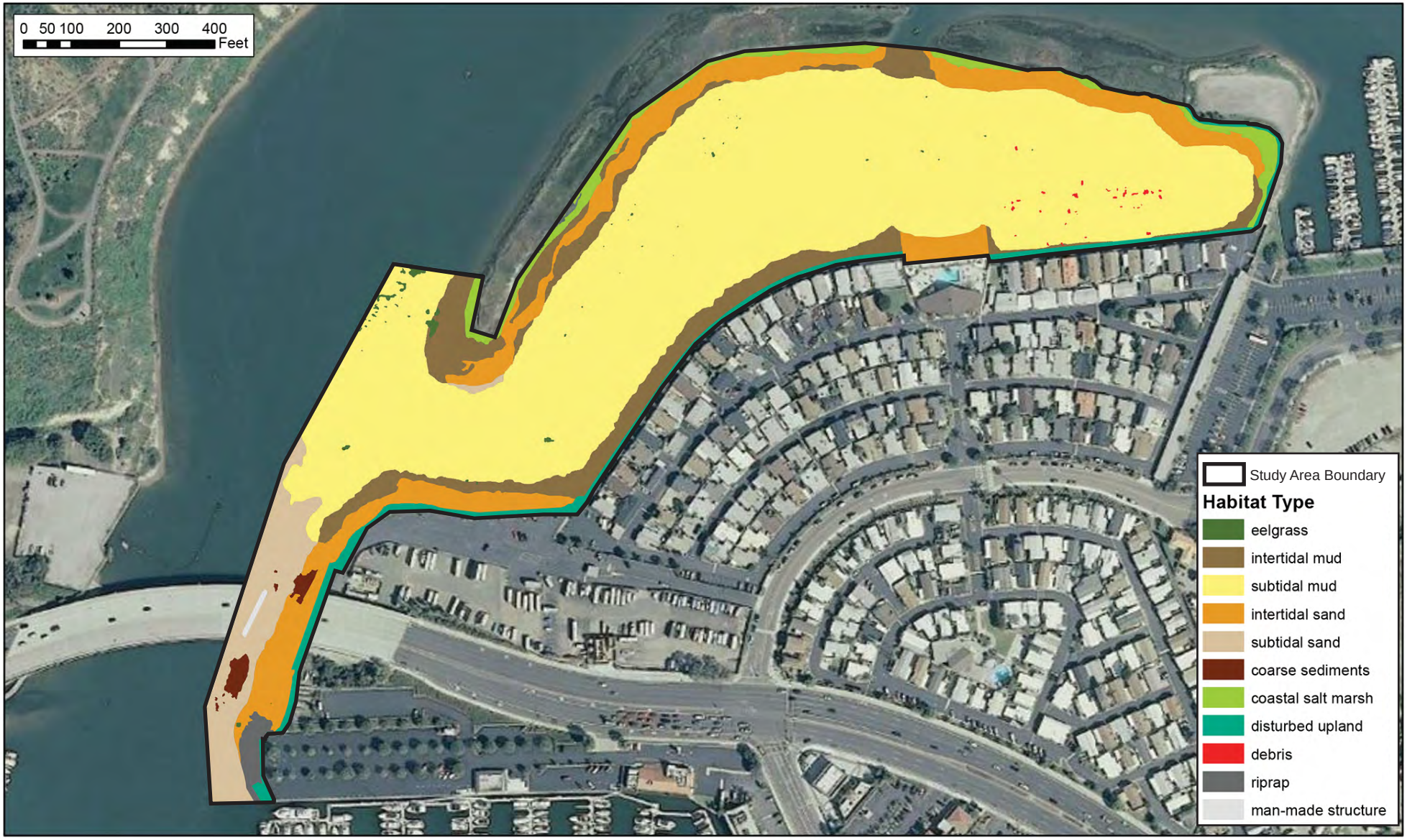
(1) Physical Site Conditions

The Back Bay Landing project study area ("study area") consists of a shoreline dominated by hard structures including a bulkhead wall, two cement groins, concrete block riprap revetments, and scrap metal (refer to **Figure 4.C-1**, *Marine Biological Resources Habitat Map*, below). There are two small areas of intertidal sand; one is a linear area adjacent to and below the marina parking lot and the other is currently utilized by mobile home park residents as a private recreational area. Nearshore subtidal habitat consists primarily of unvegetated mud bottom, with some vegetated habitat (eelgrass patches) scattered in the shallow areas. The northern portion of the study area is bounded by a constructed salt marsh peninsula (De Anza Bayside Marsh Peninsula). The bottom slopes gently from the intertidal sand and mud areas and bulkhead wall, increasing in depth to support a channel between the shoreline and the salt marsh peninsula. Tidal elevations within the study area extend from +7.1 mean lower low water (MLLW) elevation to a depth of approximately -8 feet MLLW within the basin and -16 feet MLLW under the East Coast Highway bridge. Water visibility at the time of the survey was approximately 2 to 5 feet. The following section describes the habitat types present within the study area.

(2) Baseline Eelgrass Survey

A baseline eelgrass survey was conducted on October 18, 2012, which determined that eelgrass patches were located in the shallow water (less than -12 feet MLLW) at four locations: 1) near the north portion of the channel between the shore and the salt marsh peninsula, 2) offshore from docks at the center of the site, 3) in the shallow area between the Marina Parking Lot and the docks, and 4) offshore from the riprap near the channel at the southernmost area of the site (see **Figure 4.C-2**, *Eelgrass Baseline Survey Results*, below). Approximately 30 m^2 of eelgrass was observed close to shore by the Marina Parking Lot in the basin, and about 8.3 m^2 of eelgrass was located close to shore at the southernmost portion of the site near the riprap (refer to Figures 4.C-1 and 4.C-2). The eelgrass patches close to shore in the basin and channel ranged in size from less than 1 m^2 to 14 m^2.

Two reference sites were created since it is likely that variable environmental conditions occur inside of the adjacent marina basin and outside of the basin in the main Newport Bay Channel (at the southern end of the site; see Figure 4.C-2). The basin eelgrass reference area encompassed approximately 16 m^2 of eelgrass within 4,706 m^2 of area located directly south of the constructed salt marsh peninsula. The channel eelgrass reference area encompassed approximately 206 m^2 of eelgrass within 2,758 m^2 of area located west of the salt marsh peninsula. Both reference sites consisted of patchy, noncontiguous eelgrass beds. Eelgrass blades within the basin and near the channel were two to three feet in length.



PCR

N

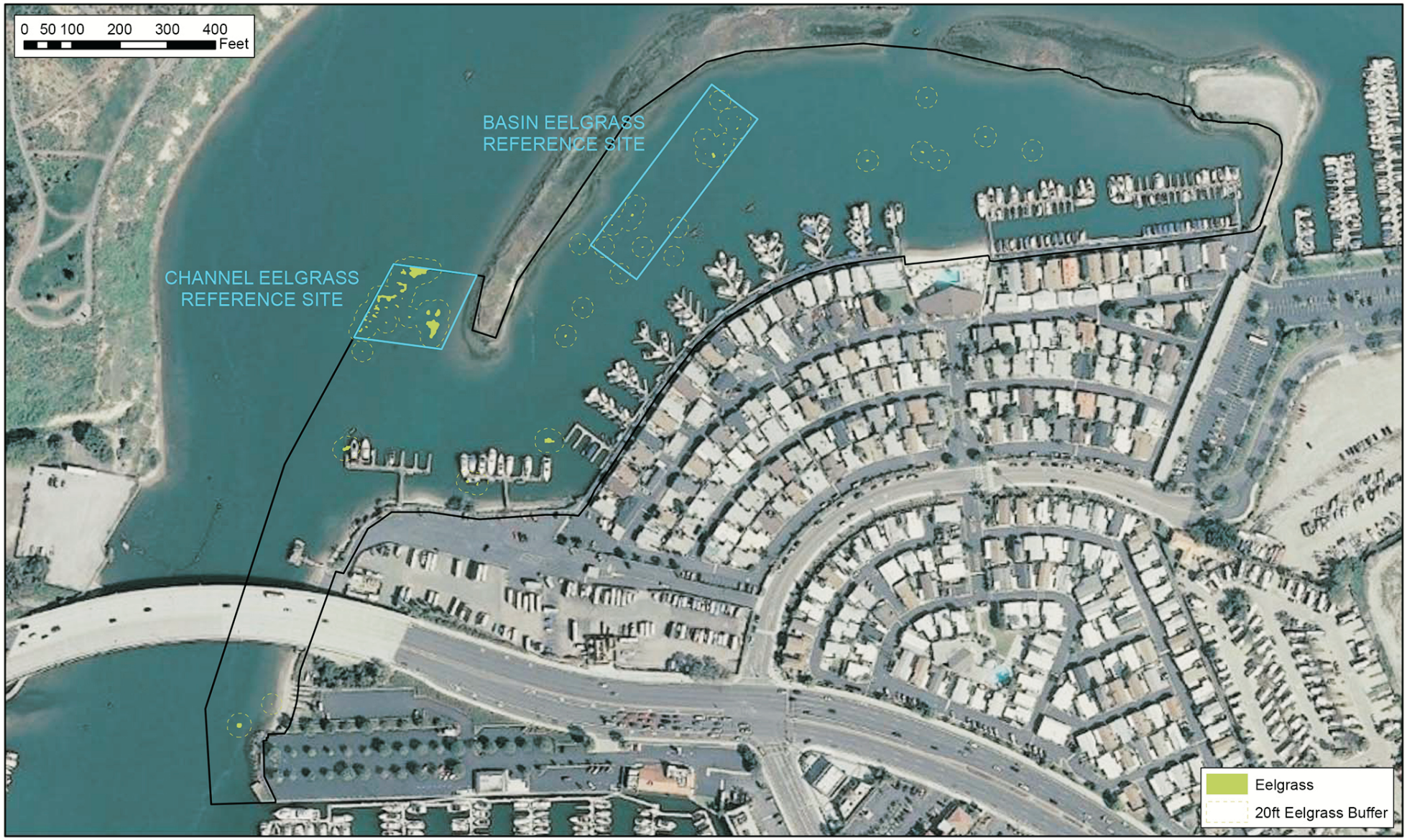
Marine Habitat Map

Back Bay Landing

Source: Merkel & Associates, Inc., 2013.

FIGURE

4.C-1



PCR

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Eelgrass Baseline Survey Results

Back Bay Landing

Source: Merkel & Associates, Inc., 2013.

FIGURE

4.C-2

Eelgrass-vegetated habitats are an essential component of southern California's coastal marine environment. Eelgrass beds function as important habitat for a variety of invertebrate, fish, and avian (bird) species. For many species, eelgrass beds are an essential biological habitat component for at least a portion of their life cycle, providing resting and feeding sites along the Pacific Flyway for avian species, and nursery sites for numerous species of fish. No fish species were observed within the eelgrass patches during the survey, but typical eelgrass associates include pipefish (*Syngnathus* spp.), kelpfish (Family *Clinidae*), surfperch (Family *Embiotocidae*), round stingray (*Urobatis halleri*), as well as schooling silversides such as topsmelt (*Atherinops affinis*) and anchovy (*Anchoa* spp.).

(3) Marine Resources

(a) Subtidal Unvegetated Habitat

Bare, silty mud occurs throughout most of the off-shore area adjacent to the project site, with depths ranging to -12 feet MLLW. The majority of the study area is considered to be shallow subtidal habitat, with soft bottom consisting of fine sands and silt, and some submerged debris (e.g. scraps of metal and concrete). The northern portion of the study area consists of generally bare, soft sediment, while the southern portion consists of sediment mixed with shell hash.

The only fish observed in subtidal unvegetated habitat were Round stingrays (*Urobatis halleri*) and juvenile barred sand bass (*Paralabrax nebulifer*). However, other demersal fish species (i.e., those that live or feed on the bottom of the seabed) including gobies (Family *Gobiidae*) are likely to utilize this habitat.

Invertebrates were sparse, although the mud had some signs of burrowing invertebrate activities, likely from bivalves (*Chione* spp., *Macoma* spp.), amphipods (*Grandidierella japonica*), bay ghost shrimp (*Callianassa californiensis*), burrowing anemones (*Harenactis attenuata*), and tube-dwelling anemones (*Pachycerianthus fimbriatus*). Other invertebrates occasionally observed included the sea slug (*opisthobranch Navanax inermis*), bubble snail (*Bulla gouldiana*), as well as calcareous bryozoans and soft bryozoans (i.e., filter feeding animals commonly known as "moss animals") including the non-native *Zoobotryon verticillatum*. The occasional debris found on the bottom supported species more typical of hard substrates, including sponges (Phylum *Porifera*), invasive non-native tunicates (i.e., marine filter feeders with a saclike morphology, including species such as *Styela plicata* and *Botrylloides* spp.), and native oysters (*Ostrea lurida*).

(b) Subtidal Vegetated Habitat

Subtidal vegetated habitat within the study area consisted of eelgrass. Results of the baseline eelgrass survey are discussed above.

(c) Open Water

Topsmelt were observed in the water column during the survey. A fisheries monitoring program that was conducted in 2011 as part of the post-restoration monitoring for the Upper Newport Bay Ecosystem Restoration Project (M&A, unpublished data) includes a sampling station located near to the Back Bay Landing project site. Sampling conducted in the adjacent channel and shallow shoreline in 2012 found dominant fish species to include: Slough anchovy (*Anchoa delicatissima*), round stingray, diamond turbot (*Hypsopsetta guttulata*), kelp bass (*Paralabrax clathratus*), California grunion (*Leuresthes tenuis*), California halibut (*Paralichthys californicus*), hornyhead turbot (*Pleuronichthys verticalis*), California needlefish

(*Strongylura exilus*), shiner surfperch (*Cymatogaster aggregate*), spotfin croaker (*Roncador stearnsii*), barred sand bass (*Paralabrax nebulifer*), northern anchovy (*Engraulis mordax*), spotted sand bass (*Paralabrax maculatofasciatus*), yellowfin croaker (*Umbrina roncador*), bay blenny (*Hypsoblennius gentilis*), bay pipefish (*Syngnathus leptorhyncus*), cheekspot goby (*Ilypnus gilberti*), and yellowfin goby (*Acanthogobius flavimanus*). The occurrence of these species in open water is important to several species of piscivorous (i.e., fish-eating) birds including pelicans, terns, loons, grebes, cormorants, and mergansers, which are known to forage in this area.

(d) Intertidal Riprap Revetment

The shoreline in the southern portion of the study area, immediately south of Planning Area 2, is armored with concrete block riprap revetment within intertidal elevations and extending down to roughly -2 feet MLLW where it transitions to vegetated and unvegetated subtidal habitat. The intertidal riprap within the project area is generally inhabited by organisms belonging to gastropod snails and limpets, as well as arthropods including the lined shore crab (*Pachygrapsus crassipes*) and barnacles (*Chthamalus* spp., *Balanus* sp.).

(e) Intertidal Sand

The habitat adjacent to and north of the rip rap area (which is just south of Planning Area 2, as noted above) consists of intertidal sand. Several avian species were observed foraging in this area. Species observed included willet (*Catoptrophurus semipalmatus*), rock dove (*Columba livia*), black-bellied plover (*Pluvialis squatarola*), and marbled godwit (*Limosa fedoa*). Flora was absent within the intertidal sand habitat.

(f) Bulkhead Walls and Cement Groins

The northern portion of the study area along the marina waterfront (i.e., Planning Area 3) is lined with a bulkhead wall and a sandy beach that is protected by two cement groins that extend perpendicular to the beach. The cement groins reach from intertidal depths to approximately -3 feet MLLW. The bulkhead wall and groins provide habitat for an assemblage of organisms known as the "fouling community" (i.e., communities of organisms found on artificial surfaces like the sides of docks, marinas, harbors, and boats throughout the world). The organisms observed at the site included non-native Japanese oysters (*Crassostrea gigas*), native oysters (*Ostrea lurida*), native bay mussels (*Mytilus edulis*), barnacles, and limpets.

(g) Pilings

Dock pilings occur throughout the study area, offshore of the existing sandy beach and bulkhead wall that are within Planning Area 3. Additionally, submerged bridge pilings associated with the former East Coast Highway Bridge alignment are located west of the project site within the Upper Newport Bay Channel just north of the existing East Coast Highway Bridge. Dock pilings also provide habitat for the fouling community. This community attracts schooling fish, which feed on the attached invertebrates and algae, and obtain refuge from predation. The species present and the overall complexity of the fouling community on pier, dock, and bridge pilings are dependent upon a number of factors including tidal elevation and inundation time, light availability, wave exposure, and size and shape of the pilings themselves. While several studies indicate that man-made marinas do not support the same complexity of organisms as do natural reefs, it is apparent that pier pilings in coastal marinas do provide habitat value for fouling communities and associated fish assemblages.

Pilings typically support a variety of sessile, or sedentary, invertebrate species. At the highest tidal elevations, the pilings are generally dominated by barnacles (*Chthamalus* spp., *Balanus* sp.). At lower tidal elevations, invertebrates may include the native oyster (*Ostrea lurida*), non-native oyster (*Crassostrea gigas*), sponges (Phylum *Porifera*), multiple species of tunicates including *Styela clava*, *Ciona* spp., and *Botrylloides* sp., hard and soft bryozoans, including the widespread invasive *Zoobotryon verticillatum*, and feather duster worms (Family *Sabellidae*). Mobile invertebrates associated with the pilings may include scale worms (Family *Polynoidae*) and brittle stars (Class *Ophiuroidea*). Fish species that typically associate with pilings include kelpfish (*Heterostichus rostratus*), topsmelt (*A. affinis*), barred sand bass (*P. nebulifer*), and California scorpionfish (*Scorpaena guttata*). The California scorpionfish is managed by the National Marine Fisheries Service under the Pacific Groundfish Fishery Management Plans.

Algal species associated with the piling community may include green algae (*Ulva* sp.), coralline red algae (*Corallina* spp.), and brown algae including *Dictyota flabellate*.

(4) Jurisdictional Wetland Delineation

The wetland delineation completed by Anchor QEA in 2012 and included as Appendix A to the MBRA (Appendix C to this Draft EIR) revealed the presence of several small patches of southern coastal salt marsh vegetation, consisting of Pacific pickleweed (*Sarcocornia pacifica*) and western marsh rosemary (*Limonium californicum*), along the boundary between the intertidal beach and the marina parking lot. Presence of hydric soils was confirmed through prominent shallow redox concentrations. Hydrology was confirmed through tidal elevation. No other wetland vegetation was observed within the study area.

(5) Sensitive Species

Species identified as protected, rare, sensitive, threatened or endangered by the USFWS, NMFS, or CDFW, that may be expected in the project area at various times include three bird species and two marine mammals, as shown below in **Table 4.C-1**, *Protected Species Observed or Expected to Occur within the Study Area*. None of these species was observed within the project study area at the time of the current survey effort. However, it is anticipated that California brown pelicans (*Pelecanus occidentalis californicus*) and double crested cormorants (*Phalacrocorax auritus*) loaf on docks and forage in waters adjacent to the project area. California least terns (*Sternula antillarum browni*) may forage within the project area; however, they do not nest within the project area. There are four least tern nesting areas in Orange County, including Upper Newport Bay, Bolsa Chica Ecological Reserve, Huntington State Beach, and Seal Beach National Wildlife Refuge. The least tern nesting colony in closest proximity to the project site is located on an island in the uppermost Newport Bay area. This nesting island is over two miles (3.35 km) to the northeast of the project site. A survey conducted by CDFW in 2011 determined that six breeding pairs of California least terns produced six nests in Upper Newport Bay, but these nests did not produce fledglings. Harbor seals (*Phoca vitulina*) and sea lions (*Zalophus californianus californianus*) do not breed within the project area but forage throughout Newport Bay and are observed in the bay year round. Both species are most common near the mouth at the south end of the bay, decreasing in occurrence towards the wetland habitat in the northern portions of the bay where the project site is located.

(6) Migratory and Nesting Birds

As noted above, many species of birds have been observed in the project area, which is characterized by developed, urbanized land adjacent to sensitive habitat areas within Upper Newport Bay. While the project site consists of urbanized land with small areas of disturbed vacant land, several trees and other ornamental

Table 4.C-1

Protected Species Observed or Expected to Occur within the Study Area

Common Name	Scientific Name	Status	Occurrence at Project Site
California Brown Pelican	Pelecanus occidentalis californicus	CDFW FP	Likely
Double-crested Cormorant	Phalacrocorax auritus	CDFW WL	Likely
California Least Tern	Sternula antillarum browni	SE, FE	Likely*
Harbor Seal	Phoca vitulina	MMPA	Uncommon
California Sea Lion	Zalophus californianus californianus	MMPA	Uncommon

SE – State Endangered; FE- Federally Endangered; FT – Federally Threatened; CDFW SSC- CDFW Species of Special Concern; CDFW-FP – CDFW Fully Protected Species; CDFW-WL- CDFW Watch List; MMPA – species protected by the Marine Mammal Protection Act
**Least terns are a migratory species found in the area from approximately April 1 – September 15 of each year.*

Source: Merkel & Associates, Inc., 2013

vegetation are located throughout the property. Trees on the site consist of ornamental, non-native species such as eucalyptus (family *Myrtaceae*), Australian blackwood (*Acacia* sp.), Coastal myoporum (Myoporum lateum), and Mexican fan palm (*Washingtonia robusta*) trees, as well as pine trees (*Pinus* sp.). Additionally, Olive trees (*Olea europaea*) are located within the proposed Lot Line Adjustment [LLA] area, which is currently part of the adjacent Bayside Village Mobile Home Park. Although on-site trees are generally non-native species, with limited exceptions (pine trees), they may provide nesting habitat for migratory bird species during the nesting season.

3. ENVIRONMENTAL IMPACTS

a. Methodology

(1) Field Investigations and Analysis Methods

M&A staff, Robert C. Mooney, James L. Schacher, Kira Withy-Allen, and Rachel A. Woodfield, performed marine biological surveys of the Back Bay Landing project site between October 18, 2012 and October 30, 2012. Field investigations included a baseline eelgrass survey, an intertidal habitat and terrestrial vegetation survey, general avian surveys, and subtidal marine habitat surveys.

The field investigations and analysis are provided to address the proposed project at the requested level of detail, which is legislative and other administrative approvals. When a specific development project is proposed and undergoes Site Development Review, the City will review the site conditions and determine whether or not any updates to the analyses regarding eelgrass and wetlands in or near the site are necessary to reflect current conditions at that time.

(a) Baseline Eelgrass Survey

A baseline assessment of eelgrass resources was performed by collecting field data with an interferometric wide-swath sonar system operating at 468 kHz. The sonar was set to scan out to 35 meters (m) on both the

starboard and port channels for a 70-m wide swath. Parallel survey tracklines were navigated through the project survey area until the entire survey footprint was covered. For the purposes of the baseline survey, the survey area included all submerged fee owned lands within the project boundary and extending south under the East Coast Highway Bridge to capture the southern shoreline of the project site. Two reference sites were established for the eelgrass survey; the first was located within the basin delineated by the project area and the constructed salt marsh peninsula, and the second was located outside of this basin in the main Newport Bay channel. Adjacent tracklines were spaced to allow overlap such that the area directly beneath the sonar head (Nadir gap) was filled with valid data. Geographic positioning was provided via a dual-antenna GPS/compass receiver with better than 60-cm accuracy. The collected data were spatially corrected for vessel heave, pitch, and roll via an integrated vessel's motion sensor.

Following completion of the field survey, the digital sonar traces (backscatter data) were joined together into a single mosaic and geographically registered using the recorded navigational data. The registered sonar mosaic was then overlaid on an aerial image of the survey area and reviewed for accuracy. Eelgrass was then digitized by a geographic information systems (GIS) specialist who inspected the sonar mosaic and delineated the eelgrass boundary using ESRI ArcView GIS software. Eelgrass density data were collected within the project survey areas to assess the density and health of eelgrass. Data were collected by randomly lowering a remotely operated vehicle (ROV) to the seafloor in areas where eelgrass occurred. Once on the bottom, the ROV's video camera was focused on an attached 1/16th square meter quadrat. Eelgrass leaf-shoot densities were calculated by counting the numbers of leaf shoots within the sampled quadrats.

(b) General Marine Resources Surveys

Subtidal marine surveys were completed by an M&A biologist using SCUBA to survey the shallow unvegetated subtidal habitats along the shoreline of the project survey area. Observed flora and fauna were recorded to the lowest possible taxonomic level in the field. Voucher specimens of some species were transported to the laboratory for identification and/or verification. For intertidal surveys, an M&A biologist walked along the beach shoreline at low tide. All birds and invertebrate fauna utilizing the site were recorded. Terrestrial vegetation was mapped on an aerial photograph and then provided to a GIS specialist for digitization using ESRI ArcView software.

(c) Jurisdictional Wetlands Delineation

Section 404 of the CWA provides regulatory authority to the ACOE over the placement of dredged or fill material, including rock revetments and concrete bulkheads along with backfilled materials. As noted above, a jurisdictional wetlands delineation was completed at the project site by Anchor QEA in 2012. Results of the wetlands delineation are summarized below and the complete report has been included as Appendix A of the project MBRA (Appendix C of this Draft EIR).

(2) Approach for EIR Impact Assessment

Given the developed nature of the project site and the absence of native habitat or sensitive species on the site, the evaluation of terrestrial biological resources focused on potential impacts to nesting migratory birds due to tree removal in association with construction activities. Further, evaluation of consistency with the MBTA was performed by identifying what potential nesting habitat currently exists on the project site and determining the extent to which removal of on-site vegetation could have an adverse effect on nesting migratory birds.

Evaluation of potential indirect impacts to sensitive species, riparian habitat or other sensitive natural communities, and wetland habitat (i.e., Upper Newport Bay) focused on future project-related improvements and probable operational characteristics associated with bulkhead construction, boat storage access, stormwater pollution, lighting, noise, traffic, invasive plant species (landscaping), and domestic pet predation.

b. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including biological resources. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact relative to biological resources would occur if the project would result in the following:

Threshold 1: Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFW or USFWS (refer to Impact Statement 4.C-1 below);

Threshold 2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations by the CDFW or USFWS (refer to Impact Statement 4.C-2 below);

Threshold 3: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (possibly including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (refer to Impact Statement 4.C-3 below);

Threshold 4: 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 (refer to Impact Statement 4.C-4 below);

Threshold 5: Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands) (refer to Impact Statement 4.C-5 below); or

Threshold 6: Conflict 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 Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.).

c. Project Design Features

The proposed project would establish guidance for future development of urban uses within the project area, including the type and location of various land uses, development standards such as allowable commercial square footage and number of residential dwelling units, location of bulkheads, as well as building heights and design guidelines such as architectural styles and landscaping. A future development project on-site

would be governed by these PCDP components, and would be subject to review and approval by the City as are all proposed projects.

Although the current biological resources analysis provided for the EIR concludes that no permits relevant to this section would be needed, should resources be determined to be present and potentially affected by the future development of the site, the project applicant would be required to obtain permits from various agencies, including the ACOE, RWQCB, and CDFW, if the agencies deem them necessary. However, at this stage of planning, with no specific development proposed within any of the affected Planning Areas, permitting by the resource agencies is not possible and therefore would be conducted, as needed, when a future development project is brought forth. Applications for permits issued by these agencies, including the Section 404 Permit (ACOE), Section 401 Permit (RWQCB), and Section 1602 Permit (CDFW), are submitted for review after a specific project design has been finalized from which the nature and physical extent of impacts to resources may be determined. Receipt of these permits by the project applicant is required prior to initiation of any construction activities within those portions of the site that are under the jurisdiction of one or more of these agencies.

d. Analysis of Project Impacts

(1) Candidate, Sensitive, and Special Status Species

Threshold	Would the project have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFW or USFWS?

Impact 4.C-1 *Implementation of the proposed project would not have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFW or USFWS. This impact is considered less than significant with mitigation incorporated.*

There were no sensitive species observed within the project site during the field surveys. The project site does not feature unique or rare habitats whose alteration would significantly impact sensitive species in the area. A discussion of the likelihood of the sensitive species in the proximate area is presented above in Table 4.C-1 to occur and/or be impacted by the project is discussed below.

(a) Species-Specific Impacts

(i) Birds

Sensitive bird species that could potentially occur in the project site are the California brown pelican, double-crested cormorant, and California least tern. The brown pelican is commonly observed in the bay and is found in small numbers along the Upper Newport Bay Ecological Reserve. No large roosting aggregations occur in the project area. There would be no permanent loss of open water habitat as a result of future project implementation, but turbidity may be temporarily increased during construction, which could potentially reduce the forage efficacy of this species. However, the available open water habitat within the rest of Newport Bay and in the near-shore coastal waters would provide ample alternative foraging opportunities. Noise associated with the construction of a new bulkhead wall could potentially disturb pelicans foraging immediately adjacent to the site; however, disturbed individuals would likely relocate to available loafing and foraging areas available outside the project area. This species has been delisted from

its prior federal and state endangered species status. Brown pelicans do not breed on the mainland California coast; therefore, the project would not have an impact on nesting activities. Based on these factors, impacts of the proposed project on California brown pelican are not considered to be significant.

During its breeding season, April 1 – September 15, the endangered California least tern is observed in Newport Bay. California least terns may forage within the project area; however, they do not nest within the project area. As noted previously, there are four nesting areas in Orange County, including Upper Newport Bay, Bolsa Chica Ecological Reserve, Huntington State Beach, and Seal Beach National Wildlife Refuge. The least tern nesting colony in closest proximity to the project site is located in Upper Newport Bay on an island in the uppermost/northernmost extent of Upper Newport Bay. This nesting island is over two miles (3.35 km) to the northeast of the project site at the closest point. When nesting sites are in close proximity to construction sites, temporary increases in turbidity during project construction could disturb the foraging ability of least terns. However, the nesting site is located at a great enough distance from the nesting sites that no impact to least terns is expected.

The double-crested cormorant could experience minor foraging-related impacts due to short-term project-related turbidity. However, ample adjacent foraging area in Newport Bay would lessen this impact below significance. By the same rationale, other marine avian species that likely frequent the project site would also not experience permanent loss of loafing, nesting, or roosting habitat as a result of the proposed project, and the availability of open water for foraging throughout the bay would minimize the impact of temporary construction activities within the project area. Loafing and foraging birds typically avoid areas of extreme activity. During project construction it is anticipated that birds would seek other foraging areas and loafing areas within Newport Bay. The bay provides ample equally-suited open water and intertidal sandy beach foraging habitat and dock piling structures for loafing that may be utilized during the construction period. As a result, any construction-related impacts to other marine avian species are considered to be less than significant.

(ii) Reptiles

Green turtles (*Chelonia mydas*) and Hawksbill turtles (*Eretmochelys imbricate*) are protected marine reptile species that have been observed in other regions of Orange County, but they do not occur within Newport Bay. Since it would be very rare for turtles to enter the waters of Upper Newport Bay, no impacts to marine reptiles are anticipated.

(iii) Mammals

Harbor seals and California sea lions are observed commonly in Lower Newport Bay and less commonly in the upper portions of the bay, where the project site is located. There are no established haul-out, foraging, or breeding areas used by these or other marine mammals within the project area or vicinity, although individuals may make occasional transient use of the area.

Construction is anticipated to be of a short duration and would be almost entirely land-based, with the exception of possible dredging of the boat storage facility inlet, which could be required to provide direct water access for boats utilizing this facility. Marine mammals would be expected to temporarily leave the study area for adjacent waters if disturbed by future project-related work, most notably temporary bulkhead wall construction and inlet dredging activities, and then return following completion of these in-water or near-water activities. Thus, it is not expected that any long-term harm would occur to marine mammals.

However, the Marine Mammal Protection Act prohibits "take" of marine mammals. The definition of take under the Act, like that of the Endangered Species Act, includes "harassment". For this reason, a potentially significant impact to marine mammals could occur if animals are disturbed during construction activities, even if they are not harmed by the activities. Potential impacts to marine mammals are reduced to less than significant with mitigation incorporated.

(b) General Indirect Impacts

Indirect impacts to candidate, sensitive, or special status species can result from lighting effects, noise, vehicular collisions, domestic pet predation, water quality degradation, invasive species proliferation, or the overall increase in human activity on-site. These indirect effects can impact the species population and result in habitat modifications. Potential for such indirect impacts are discussed below.

(i) Stormwater Drainage and Water Quality

Adverse indirect impacts to sensitive species and habitats in downstream receiving water bodies could be caused by elevated pollutant loads in stormwater flows leaving the project site. Such pollutants, which are typically associated with urban development, include oil, grease, and vehicle-related fluids from parking areas, pesticides or nutrients from landscaping, pet wastes, and detergents and other household materials. However, as discussed in Subsection 3.c., Project Design Features, in Section 4.H, *Hydrology and Water Quality*, of this Draft EIR, a number of Best Management Practices (BMPs) would be incorporated into the future project design to protect water quality, including but not limited to erosion controls, sediment controls, tracking controls, non-storm water management, materials & waste management, good housekeeping practices during construction activities, as well as site design, source control, and treatment control BMPs.

These BMPs would be required as conditions under the future project's stormwater permits for construction and long-term operation of proposed uses. These state-of-the-art water quality BMPs, which would be implemented, as appropriate, during construction and throughout operation of the proposed project, would minimize pollutant loads flowing from the site into receiving waters (i.e., Upper Newport Bay) during storm events. It should be noted that few, if any, of these water quality features currently exist on the project site; therefore, although the proposed project would increase urban development and associated activities on-site, the water quality effects of the project would be minimal. With implementation of these BMPs, potential indirect impacts to candidate, sensitive, or special status species or their habitats are considered less than significant.

(ii) Lighting

Project-related lighting would be typical of urban developments, and would therefore have lighting types and intensities necessary to provide adequate visibility and safety, and would not include unusually bright lights or lights directed off-site. Given that light intensity, irrespective of the brightness of the source, is reduced by over 99-percent as an observer moves away from the light source between a distance of one and 100 meters, project-related light intensity one hundred meters beyond the site boundaries would be imperceptible. Although the proposed project would provide additional land use intensity on-site, as well as increased building heights and associated lighting, such lighting would be predominantly architectural lighting, with limited street lighting, all of which would be directed and shielded to contain light on the project site. While new light sources would be placed on-site and would be visible from farther distances

given the increased building heights, given the distance of Planning Areas 1 and 2 (i.e., the portions of the site with the most substantial development intensity), project-related lighting would not result in substantial increases in the overall light levels in the project area such that sensitive species would be significantly affected. This is because sensitive habitat areas, including the De Anza Bayside Marsh Peninsula, are located over 100 meters from Planning Areas 1 and 2, and as noted above, light intensity is reduced by over 99 percent at this distance. As such, lighting-related impacts to sensitive species would be less than significant.

Lighting of structures at night can attract many species of nocturnal migrating birds. A large proportion of migrating birds affected by human-built structures are songbirds, apparently because of their propensity to migrate at night, their low flight altitudes, and their tendency to be disoriented by artificial light, making them vulnerable to collisions with obstructions. Birds migrating at night are attracted to sources of artificial light, particularly during periods of inclement weather. Approaching the lights of tall buildings, they can become vulnerable to collisions with the structures. Although the proposed project would intensify development on-site, with a proportionate increase in artificial lighting, such lighting would be designed and installed according to the City of Newport Beach's lighting standards, and as such all lighting would be directed and shielded to avoid excessive lighting and minimize off-site light spill. Project-related lighting would be typical of other development in the area and is not expected to create a hazard to birds due to unusually bright or concentrated lighting. As a result, and given requirements for shielding of project lighting, indirect impacts to candidate, sensitive, or special status species from project-related lighting would be less than significant (refer to Section 4.A, *Aesthetics*, of this EIR for a detailed discussion of project-related light and glare impacts relative to surrounding urban uses).

(iii) Noise

Sources of urban noise associated with the conceptual future project (e.g., construction activities, outdoor dining areas, dry stack boat storage and boat service operations, daily traffic) could create a nuisance to nearby sensitive wildlife resources depending on the increase in noise and its proximity to such resources. For the proposed project, operational noise impacts would be minimal when compared to existing noise generated on site and in the vicinity by commercial development and traffic along East Coast Highway since the project mechanical design documentation would be required to ensure that HVAC/mechanical noise levels do not exceed 55 dBA at any point on a neighboring property line (refer to Section 4.J, *Noise*, of this Draft EIR for a detailed discussion of project-related noise impacts). In addition, the incremental increase in on-site stationary noise, including noise associated with dry stack boat storage and service facility operations (in Planning Areas 1 and 2), and off-site mobile source noise associated with the proposed project would be imperceptible in the context of the existing noise environment in the project area. Nonetheless, subsequent acoustical analyses for future uses, required during future Site Development Review, would determine which, if any, design-specific noise reduction features would be required to meet applicable outdoor noise standards; it should be noted that outdoor boat storage and service-related activities would require the issuance of a Minor Use Permit by the City, which would ensure that outdoor noise limits are maintained and adverse noise impacts to biological resources in the area are minimized. As such, indirect impacts to candidate, sensitive, or special status species from noise are considered less than significant.

(iv) Invasive Species

Various invasive (non-native) plant species that are used as ornamental landscaping in development projects have the potential to proliferate in native habitat areas, thereby displacing native plant species and adversely affecting potentially sensitive habitats and resident species. As such, these invasive species can result in

potentially significant adverse impacts to sensitive species and habitats if allowed to spread into native habitats. As required by the project's PCDP, a detailed landscape and irrigation plan would be prepared by a licensed landscape architect and submitted with a future Site Development Review application. All landscaping would be required to comply with the applicable landscaping requirements specified in the Newport Beach Municipal Code, including the Landscaping Standards and Water-Efficient Landscaping Sections. In addition, vegetated landscaped areas would only consist of native plants or non-native drought tolerant plants, which are determined to be non-invasive. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or as may be identified from time to time by the State of California would be employed or allowed to naturalize or persist on the site. Additionally, no plant species listed as a "noxious weed" by the State of California or the U.S. Federal Government would be utilized within the property. Therefore, indirect impacts to habitat for sensitive species from invasive plants, including habitat areas within Upper Newport Bay, are considered less than significant.

(v) Vehicular Hazards

Vehicles traveling along local roadways can incidentally collide with wildlife species near natural habitat areas potentially increasing the incidence of "road kills," including potential collisions with candidate, sensitive, or special status species. While the project would increase the number of vehicles on local roadways, natural habitat areas are not located adjacent to the site and road kills of sensitive wildlife species in areas surrounding the site are not prevalent. Incremental increases in traffic along East Coast Highway with implementation of the proposed project would not meaningfully increase vehicular collisions with sensitive species and any such increase would not affect regional population numbers or population stability. As such, indirect impacts related to candidate, sensitive, or special status species mortality from vehicular collisions would be less than significant.

(vi) Predation

Unnatural predation by domestic pets on candidate, sensitive, or special status species can occur when residential development occurs adjacent to, or in close proximity to, natural habitat areas. While the proposed project would include residential uses, which would increase the number of on-site domestic pets, leash laws and the distance from the site to sensitive natural areas and physical separation by water bodies would preclude significant impacts associated with domestic pet predation on candidate, sensitive, or special status species.

(vii) Increased Human Activity

The future provision of new formalized public coastal access at the project site is anticipated to encourage and increase pedestrian, bicycle, and boating activities along the project site waterfront, which could potentially result in adverse effects on sensitive biological resources. Although the future development of the project site pursuant to the proposed PCDP would increase the general intensity and proximity of human activity along the Upper Newport Bay waterfront, it is anticipated that most of the activity would occur within the proposed bayfront promenade. Although increased interaction with marine resources in the adjacent Bayside Village Marina and larger Upper Newport Bay would occur as a result of future project development, it is expected that this increase would not significantly affect sensitive resources given the nature of coastal activities associated with proposed uses, which include walking, jogging/running, cycling (except below bulkhead/seawall), kayaking, and boating. These activities would not be unique to the project site, and are very common in Upper Newport Bay and Newport Harbor, and would represent a relatively

small incremental increase in the intensity of coastal activities in the area. Additionally, proper trash management and water quality BMPs would minimize impacts associated with increased littering on-site.

(2) Riparian Habitat and Sensitive Natural Communities

Threshold	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations by the CDFW or USFWS?

Impact 4.C-2 *Implementation of the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations by the CDFW or USFWS. This impact is considered less than significant with mitigation incorporated.*

(a) Subtidal Unvegetated Habitat

The bulkhead wall is proposed to be placed above the highest high tide and would not result in a direct fill or coverage of subtidal unvegetated communities. However, it is possible that the placement of the bulkhead could increase shading of habitat immediately adjacent to the wall. Such shading could cause a reduction of primary productivity of planktonic and scattered benthic algal communities in the shadow of the bulkhead. The degree of shading, if any, cannot be quantified as the bulkhead design is conceptual at this time. It is anticipated, however, that any minor reduction in primary productivity at such time as a new bulkhead or seawall is constructed (which is not part of the current approvals), could be offset by the increased area of soft bottom habitat created by dredging of a new water inlet for the dry stack boat storage and service facility in Planning Area 1. As such, impacts to subtidal unvegetated habitat would be less than significant.

(b) Subtidal Vegetated Habitat

Several patches of eelgrass occur adjacent to the shoreline within the proposed project area (see Figure 4.C-2 above). Since the bulkhead wall is proposed to be placed above the highest high tide, there are no direct impacts anticipated to eelgrass from the proposed future bulkhead wall. However, there is potential risk of eelgrass damage during construction, either through increased turbidity associated with the construction work (from sediment or water runoff from adjacent upland construction), from accidental damage by equipment grounding or through vessel maneuvering (should water-based equipment be utilized at any time), or from dredging activities associated with construction of the dry stack boat storage and service facility water inlet. Appropriate construction measures may include marking eelgrass beds, minimizing turbidity and runoff through implementation of an approved storm water pollution prevention plan (SPWPP), and restriction of contractor activities to avoid damage by equipment grounding or propeller wash. Furthermore, direct impacts to eelgrass habitat would be addressed through permit conditions required by the RWQCB, ACOE, CDFW, and CCC. While project plans are currently in a conceptual design phase, and therefore impacts to subtidal vegetated habitat (including eelgrass habitat) cannot be determined or quantified at this time, future surveys and evaluation of project-specific impacts would be required as part of future Site Development Review. This potentially significant impact would be reduced to less than significant with implementation of applicable mitigation provided below, which is subject to additional analysis and revision or confirmation when a specific development project is proposed.

(c) Open Water

The proposed project would result in no increase in bay surface area coverage over open water habitat. Therefore, there would be no adverse impact to foraging habitat available for piscivorous avian species. However, the proposed project may have temporary impacts to water quality during construction, including during future dredging activities associated with creation of a new water inlet for the dry stack boat storage and service facility in Planning Area 1. Temporary effects may include localized increases in turbidity and sedimentation, along with lowered dissolved oxygen levels associated with disturbance of anoxic sulfidic sediments as part of dredging for the dry stack boat storage inlet. This elevated turbidity could potentially affect the local foraging success of piscivorous avian species. These impacts are considered to be potentially significant; however, implementation of applicable water quality BMP's and an approved SWPPP would be used to control the distribution of elevated turbidity in the water column adjacent to the work area (refer to Section 4.H, *Hydology and Water Quality*, of this Draft EIR for a detailed discussion of water quality impacts and BMPs). Given the short-term nature of construction, and containment of turbidity using BMPs, the temporary impacts to open water would be reduced to less than significant. BMPs and mitigation options for potential impacts to Open Water habitat are provided below.

(d) Intertidal Riprap Revetment

An intertidal riprap revetment is located immediately south of, and adjacent to, Planning Area 2. Although the future project is currently in the conceptual planning stages, it is not anticipated that the project would result in loss of riprap substrate due to bulkhead construction given its distance from the proposed bulkhead line, above which all physical improvements would occur. However, some fish could temporarily avoid riprap habitat near the work area during bulkhead or building construction and move to adjacent riprap during construction due to turbidity, while other species may be expected to form local feeding aggregations where encrusting communities are damaged by the work. More opportunistic fish species would be expected to temporarily move just outside of the effective range of the impact, then immediately return to forage on the released or damaged biota. These temporary impacts are not considered to be significant given the continued wide availability of comparable intertidal riprap habitat downshore of the project site that would serve as a temporary refuge. The riprap revetments consist of loosely placed concrete blocks with some crevices and structural complexity. However, most of the riprap revetment is above the Mean High Tide line, and few organisms were observed utilizing the space during the recent field studies. The removal of riprap revetments would also provide more open sand area and open water foraging area for birds such as grebes. Because of this relatively low quality habitat function of the existing riprap, along with the increase in open water, subtidal unvegetated bottom, and associated habitat values resulting from removal of riprap revetments, impacts to intertidal riprap revetments are not considered to be significant.

(e) Intertidal Sand

Birds were the primary fauna observed on the intertidal sand area. No permanent impacts to intertidal sand areas are anticipated. Temporary impacts may include disturbance of loafing or foraging birds and reduced foraging area during future project construction. However, Newport Bay provides additional intertidal sand and mudflat foraging habitat in nearby areas and it is anticipated that birds would utilize these alternative locations during project construction. Other potential impacts include sediment or water runoff from land-based construction; these would be mitigated through implementation of project BMPs and an approved SWPPP, as noted above. Additionally, construction of the proposed future bulkhead wall along the Planning Area 1 waterfront would not have any direct physical effects on intertidal sand, as the proposed PCDP requires that the entirety of the wall be constructed above the Highest High Water contour elevation of 7.86

feet relative to MLLW (0.0 feet). Indirect impacts from bulkhead construction in proximity to intertidal sand would be addressed through implementation of appropriate BMPs, as would occur for other construction activities on-site. As a result, any construction-related impacts to marine avian species are considered to be less than significant.

(f) Pilings

The proposed project would result in no change to existing dock or former bridge pilings, and no impacts are anticipated. However, BMPs would still be employed to prevent any adverse construction-related turbidity effects in adjacent waters.

(3) Wetlands

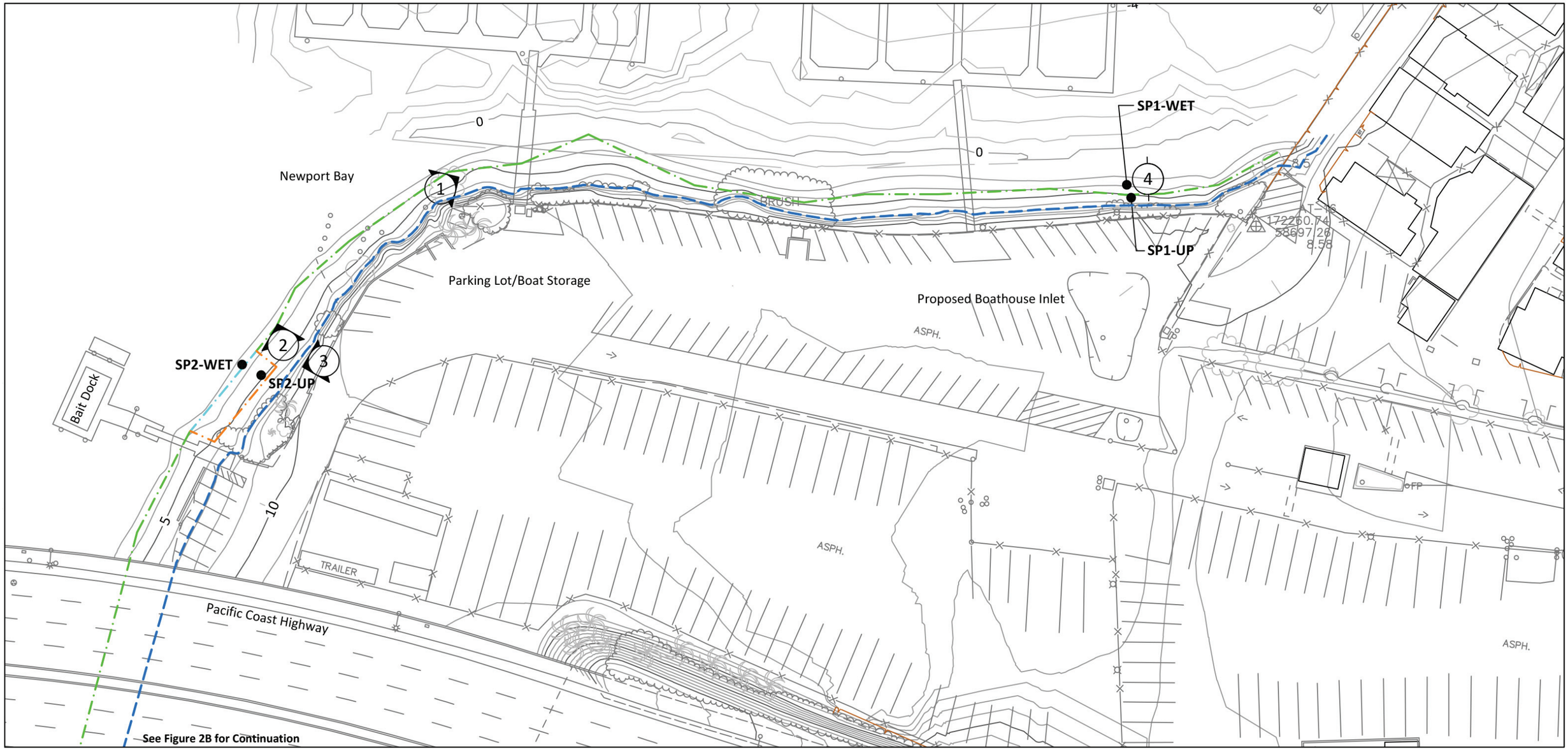
Threshold	Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (possibly including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact 4.C-3 *Implementation of the proposed project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (possibly including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Impacts would be less than significant with mitigation.*

Figure 4.C-3, *Wetland Delineation Map (North)*, and **Figure 4.C-4**, *Wetland Delineation Map (South)*, below, provide results of the wetland delineation, including boundaries for regulatory jurisdiction. Under Section 404, the ACOE regulatory boundary is the highest high tide plus any adjacent wetlands. In Newport Bay, the highest high tide is +7.1 feet MLLW (Newport Datum). The wetland delineation study determined that since the placement of the proposed bulkhead wall would be at +7.86 feet MLLW, the project would avoid physical effects to wetlands defined by Section 404 of the CWA (Anchor QEA 2012). The landward extent of potential ACOE jurisdictional wetlands and wetlands as defined by the CCC were identical throughout the majority of the study area, with the exception of a small area immediately north of the ramp to the Pearson's Port Fish Market (see Figure 4.C-3). At this location, small patches of pickleweed extended landward of the ACOE jurisdictional wetlands, where hydric soils and hydrology were lacking. However, even at this location, the proposed future seawall bulkhead would be constructed well outside CCC jurisdictional areas. As such, no impacts to wetlands would occur from bulkhead construction.

However, the proposed PCDP allows for the potential construction of a water inlet to the proposed dry stack boat storage and service facility in Planning Area 1, which would require dredging of a small channel from the existing marina to the interior of the site.

Although dredging of the marina is currently allowed when permitted by the City of Newport Beach, this dredging activity would also require permits from affected resource agencies such as the ACOE, CDFW, CCC, and RWQCB for dredging or filling in jurisdictional waters. As noted above, the specific design of future improvements has not been determined, and therefore it is not currently possible to quantify the areal extent of wetland impacts associated with construction of the proposed water inlet. However, further analysis of wetlands impacts, including a project-specific jurisdictional delineation, would be required as part of future Site Development Review once a development proposal is brought forth. Nonetheless, the



SOURCE: Bathymetric survey from Atlas Engineering Company, dated August 12, 2009. Topographic survey from Fuscoe Engineering, dated July 15, 2009.
HORIZONTAL DATUM: California State Plane, Zone 6, NAD83.
VERTICAL DATUM: North American Vertical Datum, NAVD88.

NOTE: The USACE has indicated that the limit of its jurisdiction under Section 404 of the Clean Water Act is 6.9 feet (7.1 feet above MLLW) in addition to any adjacent wetlands (Stephen Estes, USACE, pers. comm.).

LEGEND:

- Potential Wetlands or Waters - USACE and CCC Joint Jurisdiction
- Potential Wetlands or Waters - USACE Jurisdiction
- Potential Wetlands or Waters - CCC Jurisdiction
- Proposed Bulkhead Sheetpile Wall Location at 7.86 Ft, 7.1 Ft (MLLW)
- 1 — Photograph Location and Direction (See Appendix C for Photographs)

0 50
Scale in Feet

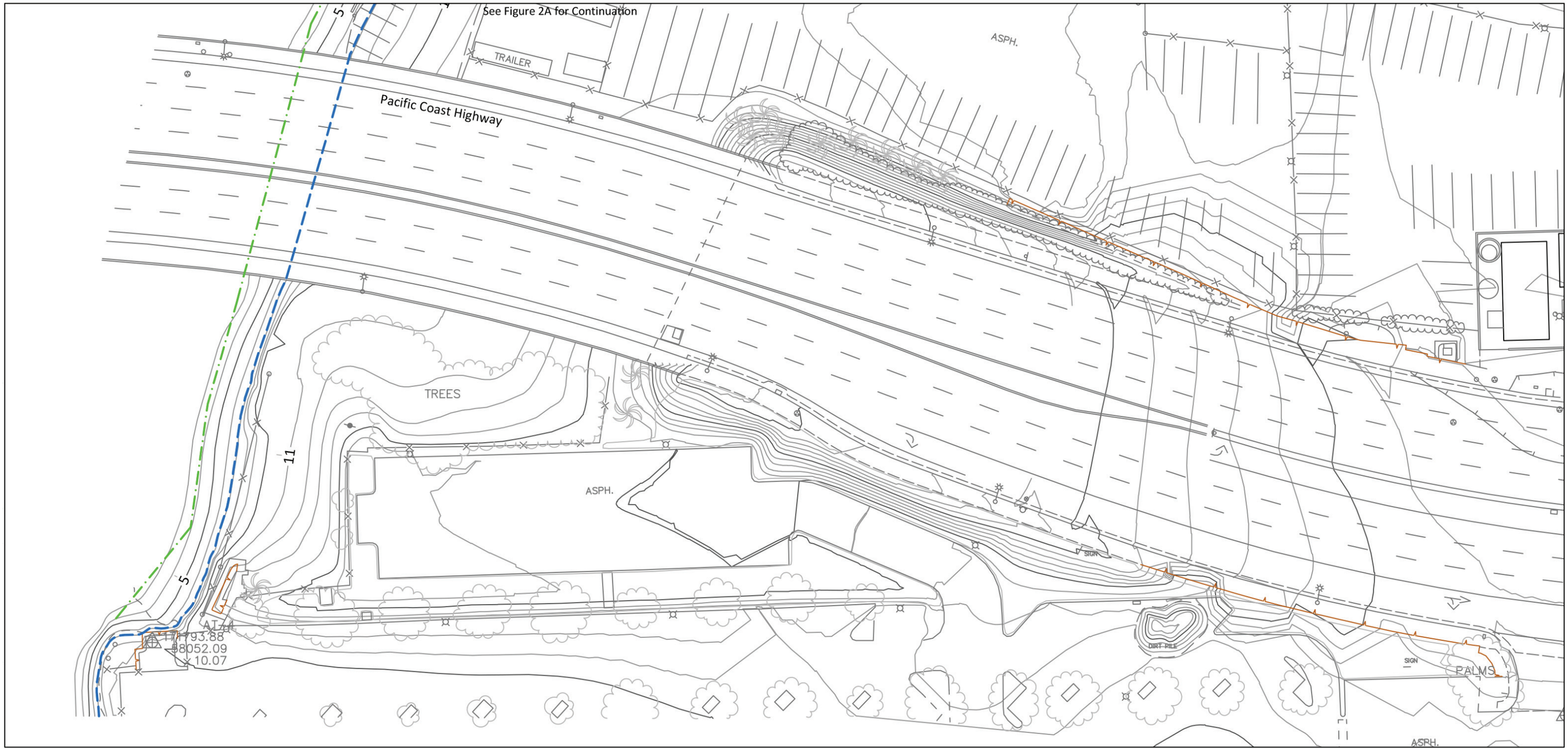
PCR

N

Wetland Delineation Map (North)

Back Bay Landing
Source: Merkel & Associates, Inc., 2013.

FIGURE
4.C-3



SOURCE: Bathymetric survey from Atlas Engineering Company, dated August 12, 2009. Topographic survey from Fuscoe Engineering, dated July 15, 2009.
HORIZONTAL DATUM: California State Plane, Zone 6, NAD83.
VERTICAL DATUM: NAVD88.

NOTE: The USACE has indicated that the limit of its jurisdiction under Section 404 of the Clean Water Act is 6.9 feet (7.1 feet above MLLW) in addition to any adjacent wetlands (Stephen Estes, USACE, pers. comm.).

LEGEND:

- Potential Wetlands or Waters - USACE and CCC Joint Jurisdiction
- Proposed Bulkhead Sheetpile Wall Location at 7.86 Ft, 7.1 Ft (MLLW)
- 1 — Photograph Location and Direction (See Appendix C for Photographs)

0 50
Scale in Feet

PCR

N

Wetland Delineation Map (South)

Back Bay Landing
Source: Merkel & Associates, Inc., 2013.

FIGURE
4.C-4

creation of new open water habitat through construction of the proposed inlet could potentially offset the loss of a limited area of wetland habitat loss (i.e., small strip of intertidal sand). Although the specific requirements of the resource agencies cannot be determined at this time, mitigation for wetlands impacts would generally include on- or off-site creation, restoration, or enhancement of wetland habitat. With implementation of applicable mitigation measures, impacts to wetlands would be less than significant.

(4) Wildlife Movement

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

Impact 4.C-4 *Implementation of the proposed project would not 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. This impact is considered less than significant with mitigation incorporated.*

(a) Wildlife Movement

The study area supports live-in and movement habitat for species on a local scale (i.e., some limited live-in and at least marginal movement habitat for reptile, bird, and mammal species), but it likely provides little to no function to facilitate wildlife movement for wildlife species on a regional scale, and the site itself is not identified as a regionally important dispersal or seasonal migration corridor. Movement on a local scale likely occurs with species adapted to urban environments due to the high level of development in the vicinity of the study area. Although implementation of the proposed project would result in disturbances to local wildlife movement within the site, those species adapted to urban areas would be expected to persist in the study area following future construction. As such, impacts would be less than significant and no mitigation measures would be required.

Since the study area does not function as a regional wildlife corridor and is not known to support wildlife nursery area(s), no impacts would occur and no mitigation measures would be required.

(b) Migratory Bird Species

The study area has the potential to support both raptor and songbird nests due to the presence of limited trees on-site, in addition to limited areas of shrubs and ground cover primarily on the project site perimeter. Nesting activity typically occurs from February 15 to August 31. Disturbing or destroying active nests is a violation of the MBTA (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Game Code Section 3503. The removal of vegetation during the breeding season is considered a potentially significant impact as defined by the thresholds of significance above. Any potential impacts to raptor and songbird nests would be considered potentially significant. Compliance with the MBTA, as required by Mitigation Measure C-2 below, would reduce impacts to a less than significant level.

(5) Policies or Ordinances Protecting Biological Resources

Threshold	Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?

Impact 4.C-5 Implementation of the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands), or policies contained in the City's General Plan, Coastal Land Use Plan, or the California Coastal Act. This impact is considered less than significant.

The proposed project would not conflict with applicable policies contained in the City's General Plan, Local Coastal Program Coastal Land Use Plan (CLUP), and the California Coastal Act regarding biological resources, as discussed below in **Table 4.C-2**, *General Plan Consistency Analysis*, **Table 4.C-3**, *Coastal Land Use Plan Consistency Analysis*, and **Table 4.C-4**, *California Coastal Act Consistency Analysis*. As shown in Tables 4.C-2, 4.C-3, and 4.C-4, impacts related to consistency with the Newport Beach General Plan, Coastal Land Use Plan, and the California Coastal Act regarding biological resources would be less than significant.

4. MITIGATION MEASURES

The following mitigation measure addresses the potentially significant impact of the proposed project on biological resources:

a. Sensitive Species

(1) Birds

There are no significant impacts to least terns anticipated since the nearest nesting sites are over two miles from the project site. However, since least terns are known to forage in the area, the following precautions should be taken to reduce potential impacts to a less than significant level:

Mitigation Measure C-1: At the time of Site Development Review, the City shall require actions to prevent impacts to least terns if the construction schedule overlaps with the least tern breeding season of April 1 – September 15. The specific actions will be determined at the time of Site Development Review and will be based on conditions at that time, including least tern foraging. The actions will meet a standard of mitigating impacts to the least tern to a less than significant level, and may include the following types of actions.

- Daily monitoring by a qualified biologist within 500 feet of construction activities once terns have arrived in the nesting colony (typically early April).
- Contractor delay in commencing work if terns are present and actively foraging (e.g. searching and diving) within the work area.
- Alternative distances and actions if it can be demonstrated that continuing construction within less than 500 feet and implementation of other construction period methods will not cause an adverse impact to the least tern.
- Should adverse impacts to terns occur (e.g. agitation or startling during foraging activities), construction shall cease until least terns have left the project site.

Table 4.C-2

General Plan Consistency Analysis

Goal/Policy	Project Consistency Statement
Land Use Element	
Policy LU 1.3: Natural Resources. Protect the natural setting that contributes to the character and identity of Newport Beach and the sense of place it provides for its residents and visitors. Preserve open space resources, beaches, harbor, parks, bluffs, preserves, and estuaries as visual, recreational and habitat resources.	**Consistent.** The proposed project would not cause any substantial adverse effects on natural resources in the project area, either directly or indirectly, with implementation of applicable mitigation measures. The proposed project would be protective of proximate habitat resources within Upper Newport Bay.
Policy LU 3.7: Natural Resource or Hazardous Areas. Require that new development is located and designed to protect areas with high natural resource value and protect residents and visitors from threats to life or property.	**Consistent.** Mitigation measures provided below would serve to address impacts related to areas with high natural resource value, including the adjacent Upper Newport Bay ecosystem.
Natural Resources Element	
Policy NR 10.1: Terrestrial and Marine Resource Protection. Cooperate with the state and federal resource protection agencies and private organizations to protect terrestrial and marine resources.	**Consistent.** The future development of the project site would implement all requisite measures prescribed in permits issued by affected resource agencies in order to ensure that terrestrial and marine resources are adequately protected.
Policy NR 10.3: Analysis of Environmental Study Areas. Require a site-specific survey and analysis prepared by a qualified biologist as a filing requirement for any development permit applications where development would occur within or contiguous to areas identified as ESAs.	**Consistent.** Although the De Anza Bayside Marsh Peninsula is located near the project site, to the north of Planning Area 4, as depicted in Figure NR2 in the City's General Plan, future development would not occur within or contiguous to this or any other areas designated as ESAs.
Policy NR 10.4: New Development Siting and Design. Require that the siting and design of new development, including landscaping and public access, protect sensitive or rare resources against any significant disruption of habitat values.	**Consistent.** As noted above, site design and landscaping for a potential future project would be required to be protective of nearby sensitive resources within Upper Newport Bay, including shielded lighting and use of non-invasive plant species. Additionally, indirect impacts to nearby sensitive habitats related to water quality effects would be addressed through applicable BMPs and project-specific mitigation measures provided below and in Section 4.H, Hydrology and Water Quality, of this Draft EIR. Direct impacts to wetlands, as could occur as part of the construction of the proposed dry stack boat storage facility water inlet, would be mitigated through permit conditions required by agencies such as the ACOE and CCC. Such conditions are anticipated to include the creation, restoration, or enhancement of wetland habitat either on- or off-site to offset impacts, the extent of which would be determined through a subsequent jurisdictional delineation to be prepared once a specific development proposal is brought forth.
Policy NR 10.5: Development in Areas Containing	**Consistent.** The project site is located near the Upper

Table 4.C-2 (Continued)

General Plan Consistency Analysis

Goal/Policy	Project Consistency Statement
Significant or Rare Biological Resources. Limit uses within an area containing any significant or rare biological resources to only those uses that are dependent on such resources, except where application of such a limitation would result in a taking of private property. If application of this policy would likely constitute a taking of private property, then a non-resource-dependent use shall be allowed on the property, provided development is limited to the minimum amount necessary to avoid a taking and the development is consistent with all other applicable resource protection policies. Public access improvements and educational, interpretative and research facilities are considered resource dependent uses.	Newport Bay Ecological Reserve, but no portion of the site is located within the Reserve, nor does the project site contain any significant or rare biological resources.
Policy NR 10.6: Use of Buffers. Maintain a buffer of sufficient size around significant or rare biological resources, if present, to ensure the protection of these resources. Require the use of native vegetation and prohibit invasive plant species within these buffer areas.	**Consistent.** The project site is not located adjacent to any significant or rare biological resources that could be substantially adversely affected by future project implementation. As noted previously, all landscaping on-site would consist of non-invasive species.
Policy NR 10.7: Exterior Lighting. Shield and direct exterior lighting away from significant or rare biological resources to minimize impacts to wildlife.	**Consistent.** All project-related lighting, as required by Section 20.30.070, *Outdoor Lighting*, of the NBMC, would be shielded and directed on the site in order to prevent any off-site light spill that could adversely affect biological resources.
Policy NR 11.3: Eelgrass Protection. Avoid impacts to eelgrass (Zostera marina) to the extent feasible. Mitigate losses of eelgrass in accordance with the Southern California Eelgrass Mitigation Policy. Encourage the restoration of eelgrass in Newport Harbor at appropriate sites, where feasible.	**Consistent.** Mitigation provided below and standard water quality BMPs would serve to minimize impacts related to eelgrass habitat.
Policy NR 13.1: Wetland Protection. Recognize and protect wetlands for their commercial, recreational, water quality, and habitat value.	**Consistent.** Standard water quality BMPs and mitigation provided below would serve to address indirect impacts related to land-based construction activities near the wetlands adjacent to the water side of Planning Areas 1 and 2. For dredging or other in-water activities, such as may be necessary for construction of the dry stack boat storage facility water inlet, direct impacts to wetlands would be mitigated through permit conditions required by the ACOE and CCC. Such conditions are anticipated to include the creation, restoration, or enhancement of wetland habitat either on- or off-site to offset impacts, the extent of which would be determined through a subsequent, project-specific jurisdictional delineation to be prepared once a specific development proposal is brought forth.

Table 4.C-2 (Continued)

General Plan Consistency Analysis

Goal/Policy	Project Consistency Statement
Policy NR 13.2: Wetland Delineation. Require a survey and analysis with the delineation of all wetland areas when the initial site survey indicates the presence or potential for wetland species or indicators. Wetland delineations will be conducted in accordance with the definitions of wetland boundaries established by California Department of Fish and Game, and/or United States Fish and Wildlife Service.	**Consistent.** A wetland delineation for the project site was conducted by Anchor QEA in 2012, and determined that no wetland resources would be affected by the future development of all landside improvements at the site pursuant to the proposed legislative approvals. However, the construction of a water inlet for the proposed dry stack boat storage facility would result in direct impacts to a narrow strip of wetland habitat. This impact would be mitigated through permit conditions required by the ACOE and CCC. Such conditions are anticipated to include the creation, restoration, or enhancement of wetland habitat either on- or off-site to offset impacts, the extent of which would be determined through a subsequent, project-specific jurisdictional delineation to be prepared once a specific development proposal is brought forth.

Source: PCR Services Corporation, 2013.

Table 4.C-3

Coastal Land Use Plan Consistency Analysis

CLUP Policy	Project Consistency Statement
4.0 Coastal Resource Protection	
4.1 Biological Resources	
4.1.1 Environmentally Sensitive Habitats	
Policy 4.1.1-2. Require a site-specific survey and analysis prepared by a qualified biologist as a filing requirement for coastal development permit applications where development would occur within or adjacent to areas identified as a potential ESHA. Identify ESHA as habitats or natural communities listed in Section 4.1.1 that possess any of the attributes listed in Policy 4.1.1-1. The ESA's depicted on Map 4-1 shall represent a preliminary mapping of areas containing potential ESHA.	**Consistent.** As discussed above, future development on-site would not result in significant project-related or cumulative impacts to an ESHA, including the nearby De Anza Bayside Marsh Peninsula, which is identified in the City's General Plan as an Environmental Study Area (ESA). No future development pursuant to the proposed PCDP would occur within this or any other designated ESA, and therefore no direct impacts would result from project implementation. Furthermore, mitigation measures provided below would avoid or minimize potential indirect impacts to sensitive biological resources in the project area.
Policy 4.1.1-4. Protect ESHAs against any significant disruption of habitat values.	**Consistent.** See response to Policy 4.1.1-2. Mitigation measures provided below would avoid or minimize potential impacts to sensitive biological resources in the project area.

Table 4.C-3 (Continued)

Coastal Land Use Plan Consistency Analysis

CLUP Policy	Project Consistency Statement
Policy 4.1.1-5. Design land divisions, including lot line adjustments, to preclude new development within and minimize impacts to ESHAs.	**Consistent.** The proposed project involves a lot line adjustment along the interface between Planning Area 1 and the adjacent Bayside Village Mobile Home Park. This lot line adjustment would occur entirely within currently developed properties, and would not be proximate to any designated ESHAs. As such, the proposed lot line adjustment would not have any direct or indirect impacts on ESHAs.
Policy 4.1.1-6. Require development in areas adjacent to environmentally sensitive habitat areas to be sited and designed to prevent impacts that would significantly degrade those areas, and to be compatible with the continuance of those habitat areas.	**Consistent.** As discussed above, the proposed project would not result in any direct impacts to environmentally sensitive habitat areas, and indirect impacts to nearby sensitive resources would be minimized through implementation of applicable mitigation measures.
Policy 4.1.1-13. Shield and direct exterior lighting away from ESHAs to minimize impacts to wildlife.	**Consistent.** All project-related lighting, as required by Section 20.30.070, *Outdoor Lighting*, of the NBMC, would be shielded and directed on the site in order to prevent any off-site light spill that could adversely affect biological resources, including those within nearby ESHAs.
4.1.2 Marine Resources	
Policy 4.1.2-1. Maintain, enhance, and, where feasible, restore marine resources.	**Consistent.** While the future implementation of the proposed project could result in limited impacts to marine resources, mainly during construction activities, mitigation measures provided below would maintain habitat values and preserve existing resources in the project area.
Policy 4.1.2-2. Provide special protection to marine resource areas and species of special biological or economic significance.	**Consistent.** As discussed previously, the proposed project would implement a number of mitigation measures intended to protect sensitive species and habitats within the adjacent Upper Newport Bay. Such mitigation measures would be protective of this marine resource area and the sensitive species and habitats within it.
Policy 4.1.2-3. Require that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.	**Consistent.** Future development on-site pursuant to the proposed PCDP would allow for marine-dependent uses including boat storage and service uses, kayak and boat rentals, and associated launching facilities. Although future uses would incrementally increase the use of the marine environment in the project area for recreational purposes, this increase is not expected to notably affect the biological productivity of coastal waters or marine organism populations. However, mitigation measures and compliance with applicable regulations would ensure that the proposed project does not adversely

Table 4.C-3 (Continued)

Coastal Land Use Plan Consistency Analysis

CLUP Policy	Project Consistency Statement
	impact long-term commercial, recreational, scientific, or educational uses of nearby coastal waters.
4.1.3 Environmental Study Areas	
Policy 4.1.3-1. Utilize the following mitigation measures to reduce the potential for adverse impacts to ESA natural habitats from sources including, but not limited to, those identified in Table 4.1.1: A. Require removal of unauthorized bulkheads, docks and patios or other structures that impact wetlands or other sensitive habitat areas. B. Where pedestrian access is permitted, avoid adverse impacts to sensitive areas from pedestrian traffic through the use of well defined footpaths, boardwalks, protective fencing, signage, and similar methods. C. Prohibit the planting of non-native plant species and require the removal of non-natives in conjunction with landscaping or revegetation projects in natural habitat areas. D. Strictly control encroachments into natural habitats to prevent impacts that would significantly degrade the habitat. E. Limit encroachments into wetlands to development that is consistent with Section 30233 of the Coastal Act and Policy 4.2.3-1 of the Coastal Land Use Plan. F. Regulate landscaping or revegetation of blufftop areas to control erosion and invasive plant species and provide a transition area between developed areas and natural habitats. G. Require irrigation practices on blufftops that minimize erosion of bluffs. H. Participate in implementation of Total Maximum Daily Loads (TMDLs) – see Section 4.3 (Water Quality). I. Participate in programs to control sedimentation into and within Upper Newport Bay.	**Consistent.** While the proposed project would not allow future development in any areas identified as an ESA in the City's General Plan, the De Anza Bayside Marsh Peninsula (an ESA) is located near the project boundaries to the north of Planning Area 4. While shoreline construction work associated with a new bulkhead and waterfront promenade would occur in proximity to Upper Newport Bay, and limited dredging associated with a new water inlet for the dry stack boat storage facility could also occur within the Bayside Village Marina, implementation of mitigation measures and standard water quality BMPs would reduce potential adverse water quality effects on the nearby De Anza Bayside Marsh Peninsula to less than significant.

Table 4.C-3 (Continued)

Coastal Land Use Plan Consistency Analysis

CLUP Policy	Project Consistency Statement
J. Use docent programs to actively manage and enforce CDFG regulations in marine protected areas regarding the taking of intertidal and subtidal plants and animals and to minimize incidental trampling. K. Manage public access as required to minimize damage to tide pools. L. Control upstream pollution sources from Buck Gully, Morning Canyon and storm drain runoff from local streets to the maximum extent practical to reduce sediment, nutrient, fecal coliform, and toxic pollutant loads. M. Implement TMDLs into Newport Bay and local watersheds to minimize water quality problems along the coastline. N. Prohibit invasive species and require removal in new development. O. Implement and enforce TMDLs in watershed and Upper Newport Bay to improve water quality in Newport Harbor. P. Require dredging and jetty reconstruction projects conducted within the Entrance Channel to include protection measures to avoid long-term impacts to kelp bed resources. Q. Continue to require Caulerpa protocol surveys as a condition of City approval for projects in Newport Bay and immediately notify the SCCAT when found.	
Policy 4.1.3-2. Prohibit the planting of invasive species in non-urbanized areas.	**Consistent.** Landscaping for future development on-site would be limited to non-invasive species, as required by the proposed PCDP. No future development or associated planting would occur in non-urbanized areas.
4.1.4 Eelgrass Meadows	
Policy 4.1.4-1. Continue to protect eelgrass meadows for their important ecological function as a nursery and foraging habitat within the Newport Bay ecosystem.	**Consistent.** Future development of the site pursuant to the proposed PCDP would include construction of new urban uses and a seawall/bulkhead in proximity to the Upper Newport Bay waterfront, as well as limited dredging activities required for construction of a new water inlet within Planning Area 1. Construction activities near the waterfront and in-water dredging

Table 4.C-3 (Continued)

Coastal Land Use Plan Consistency Analysis

CLUP Policy	Project Consistency Statement
	activities could directly or indirectly affect eelgrass meadows in proximity to the project site. However, mitigation measures provided below would reduce eelgrass-related impacts to less than significant.
Policy 4.1.4-5. Where applicable require eelgrass and Caulerpa taxifolia surveys to be conducted as a condition of City approval for projects in Newport Bay in accordance with operative protocols of the Southern California Eelgrass Mitigation Policy and Caulerpa taxifolia Survey protocols.	**Consistent.** Mitigation measures provided below require that eelgrass and Caulerpa surveys are conducted prior to future construction activities in order to accurately determine their presence and extent at the time a specific development project is brought forth.
4.2 Wetlands and Deepwater Areas	
Policy 4.2.1-1. Recognize and protect wetlands for their commercial, recreational, water quality, and habitat value.	**Consistent.** As discussed above, with the exception of the construction of a new water inlet for the proposed dry stack boat storage and service facility in Planning Area 1, the proposed project would not have any direct adverse effects on wetlands. Dredging and excavation activities associated with the new water inlet would result in limited impacts to wetland resources along the waterfront of Planning Area 1, the specific extent of which would be determined as part of a future jurisdictional delineation once a specific project design is proposed consistent with the proposed PCDP. Permit conditions by the affected resource agencies would require mitigation for affected wetland resources that is anticipated to include creation, restoration, or enhancement of wetlands either on- or off-site.
Policy 4.2.1-2. Protect, maintain and, where feasible, restore the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes.	**Consistent.** See discussion above. The future development of the project site per the proposed PCDP would not result in significant adverse impacts, either directly or indirectly, to sensitive biological resources (including wetlands) with implementation of applicable mitigation measures.
4.2.2 Wetland Definition and Delineation	
Policy 4.2.2-2. Require a survey and analysis with the delineation of all wetland areas when the initial site survey indicates the presence or potential for wetland species or indicators. Wetland delineations will be conducted in accordance with the definitions of wetland boundaries contained in section 13577(b) of the California Code of Regulations.	**Consistent.** A wetland delineation was prepared for the project site in accordance with applicable regulations and requirements. In addition, mitigation provided below require the preparation of a future project-specific wetland delineation to accurately identify the extent and severity of wetland impacts associated with future development.
4.2.5 Eelgrass Protection and Restoration	
Policy 4.2.5-1. Avoid impacts to eelgrass (Zostera marina) to the greatest extent possible. Mitigate losses of	**Consistent.** Mitigation provided below encourages avoidance of eelgrass to the extent feasible, but requires

Table 4.C-3 (Continued)

Coastal Land Use Plan Consistency Analysis

CLUP Policy	Project Consistency Statement
eelgrass at a 1.2 to 1 mitigation ratio and in accordance with the Southern California Eelgrass Mitigation Policy. Encourage the restoration of eelgrass throughout Newport Harbor where feasible.	replacement of affected eelgrass at a ratio of 1.2:1, consistent with SCEMP requirements.
Policy 4.2.3-4. Require dredging and dredged material disposal to be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation.	**Consistent.** Future dredging activities, if necessary as part of project implementation, would comply with all applicable regulations regarding dredging and dredged material disposal, in order to avoid significant disruptions for marine and wildlife habitats and water circulation.
Policy 4.2.3-7. Require the following mitigation measures for dredging projects in the Upper Newport Bay Marine Park: A. Dredging and spoils disposal must be planned and carried out to limit turbidity and to avoid significant disruption to marine and wildlife habitats and water circulation. B. Maintenance dredging shall be encouraged where the dredging enhances commercial or recreational use of the Bay. When dredged material is of an appropriate grain size and grain percentage, this material may be used to restore or replace natural sandy sloping beaches in order to retain the current profiles of Newport Bay. Maintenance dredging activity shall have the approval of the U.S. Army Corps of Engineers and shall meet applicable U.S. Environmental Protection Agency standards. C. Dredged material not suitable for beach nourishment or other permitted beneficial reuse shall be disposed of offshore at a designated U.S. Environmental Protection Agency disposal site or at an appropriate upland location. D. Temporary dewatering of dredged spoils may be authorized within the Bay's drainage if adequate erosion controls are provided and the spoils are removed. A bond or a contractual arrangement shall be a precondition to dredging of the material, and final disposal of the dewatered material on the approved dump site shall be accomplished within the time period specified in the permit.	**Consistent.** The proposed project would not involve any future dredging activities within the Upper Newport Bay Marine Park, as any potential dredging would be restricted to a limited portion of the project site waterfront within the existing Bayside Village Marina. However, future development would be subject to subsequent environmental review and the permitting requirements of various regulatory agencies, which may require these and other measures to be implemented to minimize adverse impacts to sensitive marine resources.

Table 4.C-3 (Continued)

Coastal Land Use Plan Consistency Analysis

CLUP Policy	Project Consistency Statement
E. Dredged spoils shall not be used to fill riparian areas, wetlands, or natural canyons. F. Other mitigation measures may include opening areas to tidal action, removing dikes, improving tidal flushing, restoring salt marsh or eelgrass vegetation, or other restoration measures. G. Dredge spoils suitable for beach nourishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems provided that the placement is permitted by a Section 404 permit.	
Policy 4.2.3-14. Require that any project that includes diking, filling or dredging of a wetland or estuary, as permitted pursuant to Policy 4.2.3-1, maintain the functional capacity of the wetland or estuary. Functional capacity means the ability of the wetland or estuary to be self-sustaining and to maintain natural species diversity. In order to establish that the functional capacity is being maintained, the applicant must demonstrate all of the following: A. That the project does not alter presently occurring plant and animal populations in the ecosystem in a manner that would impair the long-term stability of the ecosystem; i.e., natural species diversity, abundance, and composition are essentially unchanged as a result of the project. B. That the project does not harm or destroy a species or habitat that is rare or endangered. C. That the project does not harm a species or habitat that is essential to the natural biological functioning of the wetland or estuary. D. That the project does not significantly reduce consumptive (e.g., fishing, aquaculture and hunting) or non-consumptive (e.g., water quality and research opportunity) values of the wetland or estuarine ecosystem.	**Consistent.** Future dredging activities would not result in significant adverse impacts to sensitive habitats, including wetlands or estuaries, with implementation of applicable mitigation measures and compliance with existing regulations. With proper design pursuant to the proposed PCDP and implementation of mitigation measures during future construction activities, the proposed project would not alter plant and animal populations such that it could impair the long-term stability of the ecosystem, harm or destroy a species or habitat that is rare or endangered, harm a species or habitat that is essential to the natural biological functioning of the wetland or estuary, or significantly reduce consumptive (e.g., fishing, aquaculture and hunting) or non-consumptive (e.g., water quality and research opportunity) values of the wetland or estuarine ecosystem.

Source: PCR Services Corporation, 2013.

Table 4.C-4

California Coastal Act Consistency Analysis

Coastal Act Policy	Project Consistency Statement
Marine Environment	
Section 30230: Marine resources; maintenance. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.	**Consistent.** As noted in previous impact discussions, the project site does not contain any significant biological resources, and future development activities in accordance with the legislative approvals would occur entirely outside of the marine environment, and therefore no direct impacts to marine resources would occur. The one exception to this is the water inlet for the enclosed dry stack boat storage facility. However, the details of such a boat launching and haul out area are unknown at this time and would be addressed at the time such uses are proposed. Additionally, future implementation of the proposed project would require implementation of a number of mitigation measures and water quality-related BMPs to ensure that substantial adverse impacts to marine resources do not result from project-related construction activities.
Section 30231: Biological productivity; water quality. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.	**Consistent.** As previously discussed, water quality BMPs would be implemented on-site as part of future project implementation, which would preclude the potential for adverse water quality effects that could hinder biological productivity in adjacent water bodies.
Section 30233: Diking, filling or dredging; continued movement of sediment and nutrients. (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following: (l) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities. (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and	**Consistent.** Although it has not yet been determined whether any dredging or filling activities would be required as part of future project development on-site, if such activities were necessary, they would be carried out in accordance with applicable policies and regulations of affected regulatory agencies in order to minimize adverse impacts on sensitive biological resources. For the purposes of this EIR, it is assumed that limited dredging would be necessary near the shoreline of Planning Area 1 in order to construct a water inlet for the proposed dry stack boat storage and service facility. It should be noted that dredging within the adjacent Bayside Village Marina is permitted by the City in order to maintain safe navigation channels and adequate depths in the marina. Dredging required for the construction and maintenance of the dry stack boat storage inlet would not be substantially different than

Table 4.C-4 (Continued)

California Coastal Act Consistency Analysis

Coastal Act Policy	Project Consistency Statement
boat launching ramps. (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities. (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines. (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas. (6) Restoration purposes. (7) Nature study, aquaculture, or similar resource dependent activities. (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beach es or into suitable longshore current systems. (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division. For the purposes of this section, "commercial fishing facilities in Bodega Bay" means that not less than 80 percent of all boating facilities proposed to be developed or improved, where the improvement would create additional berths in Bodega Bay, shall be designed and used for commercial fishing activities. (d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at	the periodic dredging activities that already occur at this location. Future dredging, if required for the proposed water inlet, would require a permit from the City and would be subject to the same requirements as current off-site dredging activities.

Table 4.C-4 (Continued)

California Coastal Act Consistency Analysis

Coastal Act Policy	Project Consistency Statement
appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.	
Section 30235: Construction altering natural shoreline. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.	**Consistent.** Pursuant to the proposed PCDP, new seawall/bulkhead structures in Planning Area 1 are restricted to the Highest High Water contour elevation of 7.86' (NAVD 88) and in Planning Area 2 to the 10' contour elevation (NAVD 88) to preserve the natural shoreline profile. The bulkhead/seawall is necessary to protect existing and proposed future development areas from inundation, and also to provide a level surface for the construction of a new public bayfront promenade. Because the proposed future bulkhead/seawall would be constructed outside of the mean high tide line, it would not be expected to adversely affect marine biological resources or otherwise hinder natural marine processes.
Land Resources	
Section 30240: Environmentally sensitive habitat areas; adjacent developments. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.	**Consistent.** The proposed project is intended to incorporate and improve coastal-dependent activities in the future development of the site. Further, the project would be required to implement a number of mitigation measures and water quality-related BMPs to ensure that future on-site development does not adversely affect adjacent and nearby environmentally sensitive habitat areas.

Source: PCR Services Corporation, 2013.

The following mitigation measure addresses the potentially significant impact of the proposed project on nesting migratory birds.

Mitigation Measure C-2 The developer or a designated representative shall ensure that impacts to migratory raptor and songbird species are avoided through one or more of the following methods: (1) vegetation removal activities shall be scheduled outside the nesting season for raptor and songbird species (nesting season typically occurs from February 15 to August 31) to avoid potential impacts to nesting species (this will ensure that no active nests will be disturbed and that habitat removal could proceed rapidly); and/or (2) Any construction activities that occur during the raptor and songbird nesting season shall require that all suitable habitat be thoroughly surveyed for the presence of nesting raptor and songbird species by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the qualified biologist to minimize impacts. The developer or designated representative shall submit proof of compliance with this measure to the City of Newport Beach Community Development Department prior to tree removal activities on-site.

(2) Mammals

To mitigate potential impacts to marine mammals to a less than significant level, the following construction measures are recommended.

Mitigation Measure C-3: During construction activities when dredging or other in-water work is occurring, a qualified biologist shall conduct daily monitoring within 500 feet of construction activities. The contractor shall halt work if any observations of marine mammals are made. Work shall not re-commence until a qualified biologist determines that the mammal(s) have left the area.

Mitigation Measure C-4: If in-water construction vessel traffic is needed, the vessels shall not exceed existing ambient speed for the area.

b. Sensitive Natural Communities

(1) Subtidal Vegetated Communities

Should future dredging or filling of jurisdictional waters occur as an element of future project construction, the following measures would be required to mitigate potential impacts to eelgrass to a less than significant level:

Mitigation Measure C-5: Prior to construction, the boundaries of the eelgrass beds, located nearshore of the Back Bay Landing site, shall be staked with ridged PVC markers or self-centering buoys visible at all tide heights. The contractor shall protect, replace and maintain the markers/buoys as needed to ensure that they remain in place and properly stake the boundaries of the eelgrass beds until the City certifies that all construction activities are complete.

Mitigation Measure C-6: During shoreline work within 15 feet of eelgrass, which may involve construction of a bulkhead, dredging activities, or other in-water work, eelgrass shall be

protected by specific techniques to be determined by the City prior to construction. Techniques may include, but are not limited to, silt curtains deployed above the eelgrass and below the shoreline work area as determined to be necessary and appropriate to the impacts at the next level of approval by the City.

Mitigation Measure C-7: Any impacts to eelgrass shall be mitigated through specific measures to be required by the City at the Site Development Review stage. Examples of eelgrass mitigation include conformance to the City of Newport Beach Eelgrass Plan and to the requirements of the SCEMP, which mandates a minimum replacement ratio of 1.2:1 for eelgrass impacts (NMFS 1991, revision 11), to the extent those plans are in effect and relevant and applicable to the site conditions at such time as construction of the bulkhead is proposed.

In accordance with the requirements of the SCEMP, a pre-construction eelgrass survey shall be completed by a qualified biologist within 60 days prior to initiation of demolition or construction activities at the site. This survey shall include both area and density characterization of the beds. A post-construction survey shall be performed by a qualified biologist within 30 days following project completion to quantify any unanticipated losses to eelgrass habitat. Impacts shall then be determined from a comparison of pre- and post-construction survey results. Impacts to eelgrass, if any, would require mitigation as defined in the SCEMP. If required following the post-construction survey, a mitigation planting plan shall be developed, approved by the City and NMFS, and implemented to offset losses to eelgrass.

Mitigation Measure C-8: Not more than 90 days prior to the initiation of construction activities near the shoreline, a survey for the invasive seaweed *Caulerpa taxifolia* shall be conducted by a certified *Caulerpa* surveyor to determine the presence or absence of the species in the area affected by future construction and/or dredging activities.

For all construction activities that would occur outside of jurisdictional wetlands, with no anticipation of discharges into jurisdictional waters, the following mitigation measures would apply:

Mitigation Measure C-9: The project shall conform to the approved storm water pollution prevention plan (SWPPP) and shall incorporate construction-related erosion/sediment control Best Management Practices as detailed in project plans for a future development on-site. These include, but are not limited to: installation and maintenance of an erosion/sediment barrier, covering stockpiled material prior to rain events, maintenance of equipment to prevent runoff of grease and oil into adjacent waters, and providing equipment and staff as required to repair and/or implement erosion/sediment control measures.

(2) Open Water

To mitigate potentially significant impacts to water quality to a less than significant level the following measures would apply:

Mitigation Measure C-10: The project shall conform to the approved storm water pollution prevention plan (SWPPP) and shall incorporate construction-related erosion/sediment

control Best Management Practices as detailed in the project plans for a future development on-site. These include, but are not limited to: installation and maintenance of an erosion/sediment barrier, covering stockpiled material prior to rain events, maintenance of equipment to prevent runoff of grease and oil into adjacent waters, and providing equipment and staff as required to repair and/or implement erosion/sediment control measures.

Should project equipment or construction be anticipated to result in discharges into jurisdictional waters the following would apply:

Mitigation Measure C-11: During shoreline work, a turbidity curtain shall be deployed above the water line and below the shoreline work area in order to minimize adverse water quality-related impacts to jurisdictional waters.

c. Jurisdictional Features/Wetlands

Mitigation Measure C-12: A project-specific jurisdictional delineation shall be conducted for future on-site development as part of the Site Development Review process once a development application is submitted. The jurisdictional delineation shall determine the nature and extent of impacts to jurisdictional features resulting from future development, including impacts related to dredging required for the construction of a new water inlet for the proposed dry stack boat storage facility in Planning Area 1. Based on the nature and extent of impacts identified, mitigation shall be provided that includes, but is not limited to, on- or off-site creation, restoration, or enhancement of wetland habitat, subject to review and approval by affected resource agencies.

5. CUMULATIVE IMPACTS

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project. CEQA deems a cumulative impact analysis to be adequate if a list of "related projects" is included in the EIR or the proposed project is consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(b)(1)(B)]. CEQA also states that no further cumulative impact analysis is necessary for impacts of a proposed project consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(d)].

As discussed previously, the proposed project would not have a significant adverse effect on any candidate, sensitive, or special status species or their habitats. Also, project-related impacts to riparian habitat, sensitive natural communities, federally protected wetlands, and wildlife movement would generally be indirect and would be less than significant with mitigation. Conflicts with plans, policies, and regulations protective of biological resources would be less than significant with implementation of applicable mitigation.

As illustrated in Figure 3-1 in Chapter 3, *Basis for Cumulative Analysis*, of this Draft EIR, nearly all of the related projects are located in developed areas, which would generally preclude substantial or significant impacts relative to biological resources. Given the urbanized nature of, and associated lack of habitat on the

project site and nearly all the related project sites, the potential for direct cumulative adverse effects on candidate, sensitive, or special status species or their habitats is considered less than significant. For those related project sites where sensitive biological resources exist, mitigation measures and agency permit requirements would preclude the potential for cumulative impacts related to sensitive species and habitats. Similarly, the lack of riparian or wetland habitat and associated sensitive natural communities on the project site or related project sites would likely preclude potential adverse effects on such resources; however, if impacts could occur and not be avoided on certain sites, mitigation to offset such impacts would be required through compliance with the California Environmental Quality Act and other applicable regulations.

Additionally, given the nature of the related project development (i.e., generally low to moderate intensity low-rise urban development within an already urbanized area), the related projects would not create barriers to terrestrial wildlife movement or create impediments to bird movement with high-rise structures. Based on this lack of physical barriers to wildlife movement, and less than significant project-related impacts, cumulative impacts related to wildlife movement are also considered less than significant. With regard to conflicts with plans, policies, or regulations that are protective of biological resources, the proposed project and related projects would be required to comply with the provisions of those laws applicable to each project site, which would include the MBTA and any other relevant regulations. Given compliance with applicable laws protecting biological resources on a project-by-project basis, no conflicts with such plans, policies, or regulations would occur and therefore cumulative impacts would be less than significant.

Any impacts to jurisdictional features would be subject to permitting with the regulatory agencies, including ACOE, RWQCB, CCC and/or CDFW. With the proposed mitigation and compliance with existing regulations through the permitting process, impacts would not be considered cumulatively significant, and the project's contribution to cumulative impacts would not be considerable.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

With best management practices and mitigation measures incorporated, the proposed project would avoid any permanent adverse impacts to wetlands and marine resources, with the possible exception of limited impacts related to construction of a new water inlet in Planning Area 1. Potential impacts are anticipated to occur almost exclusively during construction and would be temporary in nature. Periodic dredging that may be required for maintenance of the inlet channel during project operation would be subject to permitting by the City of Newport Beach and applicable permit requirements, and would implement appropriate mitigation for eelgrass in accordance with City eelgrass mitigation protocols. Impacts associated with future bulkhead construction are not considered to be significant given the bulkhead wall placement outside of the ACOE and CCC jurisdiction, avoidance of eelgrass habitat, and the general lack of other high value habitat resources in the project area.

Sensitive species that may be affected include California brown pelican, California least tern, double-crested cormorant, and California sea lion and harbor seal. Construction period effects to California least tern and both marine mammals are potentially significant and may be mitigated to a less than significant level by incorporation of construction period measures to monitor for sensitive species presence, delay construction activities if species are noted in the project area, control turbidity, and allowing animals to leave the area if activities cause substantive stresses.

No long-term or permanent impacts to eelgrass habitat are anticipated; however, potential significant impacts may occur as a result of avoidable construction damage. Suspension of sediments or runoff associated with dredging or near-shore construction activities can increase light attenuation through the water column and, therefore, affects the productivity of eelgrass. Further, if marine vessels are utilized for the project, maneuvering or grounding may damage eelgrass through direct bottom contact or propeller scouring. As a result, an eelgrass impact assessment monitoring is recommended. Any impacts to eelgrass that occur would be subject to the mitigation provisions of the SCEMP, requiring a replacement of eelgrass habitat at a 1.2:1 mitigation ratio.

In addition to local approvals, a future development project would require state and federal approvals. These include issuance of a CDP by the California Coastal Commission, a combined R&H Section 10 and Section 404 Permit under the CWA by the ACOE, and a Section 401 Water Quality Certification by the RWQCB, depending upon details of project elements and methods of construction. If any ACOE permit is required, then processing of these approvals may also concurrently require compliance with the EFH consultation requirements of the Magnuson-Stevens Fisheries Conservation and Management Act, the SCEMP, and Section 106 of the National Historic Preservation Act.