# 3.3

# BIOLOGICAL RESOURCES

## 3.3.1 Introduction

This section describes the existing biological resources in the proposed Project study area, outlines the applicable regulations, analyzes the potential impacts to biological resources associated with the proposed Project, and describes appropriate mitigation measures. The biological resources of Los Angeles Harbor have been studied for many years and reported in the form of project EIRs or Environmental Impact Statements (EISs) (Jones & Stokes 2002, e2M Inc 2003, and USACE and LAHD 1992a) and baseline studies such as the Year 2000 Biological Baseline Study of San Pedro Bay (MEC and Associates 2002). Older reports provide information that is useful in describing trends in environmental conditions that affect the biological communities in the proposed project study area (HEP 1980). This section summarizes information from the reports cited above and other sources cited in the text as they apply to the proposed Project.

These data and descriptions of habitat conditions in Section 3.3.2, "Environmental Setting," rely on a variety of reports and data collected over a number of years. The primary source of biological data is from the Port-wide biological surveys conducted in 2000 (MEC and Associates 2002), augmented with more recent data as cited in this document. These data represent the existing conditions for evaluation of impacts.

## 3.3.2 Environmental Setting

The proposed Project lies within the Port of Los Angeles; most of the proposed project study area is located at Slip 5 near the head of the East Basin. This area has been an active port for approximately 100 years. The Biological Resources study area (proposed project study area) encompasses the proposed project area and the adjacent environment potentially affected by the proposed Project, including Slip 5 and areas within 100 feet of terrestrial portions of the proposed Project. Harbor waters in the proposed project study area are heavily influenced by storm drain inputs from upstream users (including from the Dominguez Channel and other County/City

of Los Angeles conveyances), as well as by industrial, commercial, and recreational uses at the Port.

The Los Angeles Harbor marine/environment provides habitat to a variety of aquatic species. The relatively protected environment and higher water temperatures give the harbor value as a nursery area for juvenile fish, and provide a diversity of habitat that contrasts with exposed coastal habitat. Because the freshwater input of the East Basin is primarily stormwater, the harbor provides primarily marine, rather than estuarine ecosystem functions.

Upstream watershed inputs, as well as the industrial, commercial, and recreational uses within the Port have strongly defined the physical conditions of the Los Angeles Harbor, and have influenced water quality and sediment quality conditions. Environmental studies of the harbor indicate water and sediment quality have changed over time, and these changes are related to the advent of federal and state water quality regulations governing wastewater and stormwater management (Clean Water Act and Porter-Cologne Water Quality Act, respectively) and industrial uses of the harbor (HEP 1980, MEC and Associates 2002). Water and sediment conditions have improved dramatically since the 1960s with the implementation of these relevant water quality regulations and associated clean up measures. In response, the biological communities that the Los Angeles Harbor supports have improved as well. Although the Los Angeles Harbor is not a pristine natural environment, it does support a diverse and functioning biological community.

The proposed project location and project study area are illustrated in Figure 3.3-1, and encompass the aquatic and upland environs generally bounded by Lagoon Avenue, Broad Avenue, C Street, and Banning's Landing at the waterfront. The entire upland component of the proposed Project is located north of the East Basin of the Los Angeles Harbor. Additionally, the Full Buildout Plan includes the construction of the California Coastal Trail—a pedestrian and bicycle corridor—and the Waterfront Red Car Line along John S. Gibson Boulevard and Harry Bridges Boulevard. The proposed project study area is illustrated in Figure 3.3-2, and encompasses those areas within 100 feet of the terrestrial portions of the proposed Project and all of Slip 5. This area was delineated based on potential impacts on terrestrial and aquatic biological resources that could result from the proposed Project.

The existing terrestrial resources within the Port also are largely a by-product of Port activities over the last century. Within the proposed project study area, essentially all uplands have been heavily modified and/or developed. Consequently, existing terrestrial biological resources are considered to be of low quality, fragmented, isolated, or absent in most areas. Special Status Species (i.e., species with special regulatory or management status) do occur within the proposed project study area. Appendix D provides a list of Special Status Species, their federal and state status, and their potential occurrence within the proposed project study area.

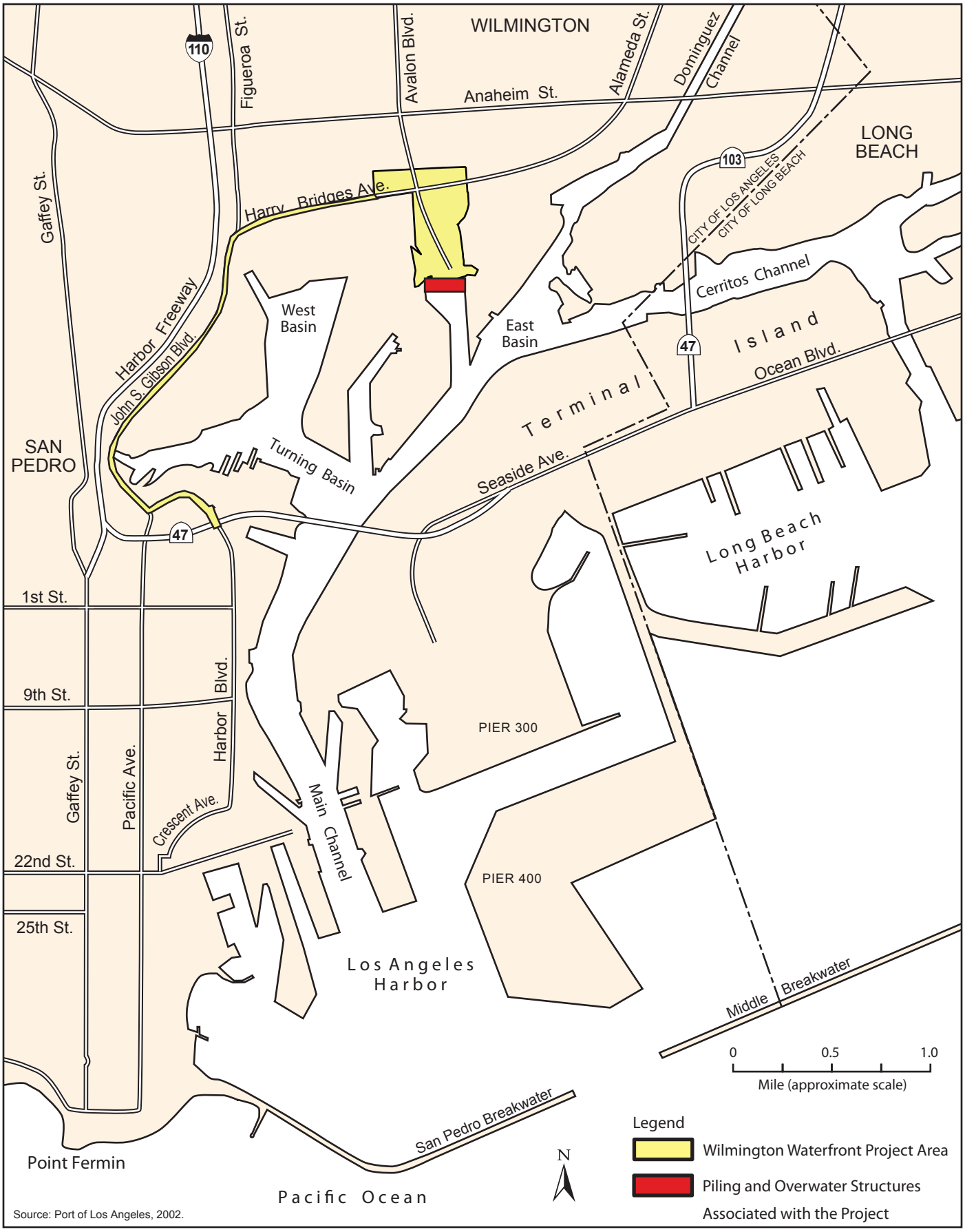


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**Figure 3.3-1**
**Project Location**
**Wilmington Waterfront Development Project**

### 3.3.2.1 Terrestrial Habitats

Within the proposed project study area the terrestrial environment can be classified as either developed or vacant land. Terrestrial habitats are defined as lands that lie outside of tidal influence/effects, thus capturing uplands but also encompassing lands that may have freshwater influences. Data analyzed for terrestrial habitats included reconnaissance-level site visits, review of California Natural Diversity Database and review of aerial photographs and current biological studies. A list of all studies cited and used to make determinations and gather baseline and background information for this section are included in Chapter 10, "References."

The most common flora species observed within the proposed project study area are sea rocket (*Cakile maritima*), tree tobacco, (*Nicotiana glauca*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), and sow thistle (*Sonchus oleraceus*), all of which are nonnative to North America (SAIC 2004, 2007). Incidental pampas grass (*Cortaderia jubata*), a nonnative species, as well as the native mule fat (*Baccharis salicifolia*), telegraph weed (*Heterotheca grandiflora*), western ragweed (*Ambrosia psilostachya*), and horseweed (*Conyza canadense*) also occur within the proposed project study area (SAIC 2007). No native plant or sensitive plant communities are present.

All wildlife species having potential to occur and/or known to occur within the proposed project study area are adapted to human-induced disturbed landscapes. The majority of terrestrial bird species that may occur at the Port are migratory and would be present during fall, winter, and/or spring but are not expected to breed within the proposed project study area.

### 3.3.2.2 Benthic Environment

The benthic (bottom) environment includes the sea floor, sediment, sediment-water interface, and associated organisms. Benthic habitats were surveyed during 1986–1987 (MEC Analytical Systems 1988) and during 2000 (MEC and Associates 2002). The Los Angeles/Long Beach Harbor area has sediments that are predominantly sand/silt (HEP 1980, MEC and Associates 2002), although the proportions and distributions vary according to area. Current velocity affects sediment sorting and deposition. Areas with the greatest proportion of sand are located in the Main Channel where currents are stronger. Weaker current velocities within the harbor (e.g., Inner Cabrillo Beach and the slips of Inner Harbor) tend to allow fine particles to settle, resulting in deposition of finer substrates. Clay makes up less than 25% of the sediment composition throughout Los Angeles Harbor. Clay and silt substrates accumulate primarily in areas of reduced current velocity and deeper basins that are protected from wave action.

No current data specific to the benthic environment of the Slip 5 were located (see Section 3.14.2.1.4, "Marine Sediments"). However, conditions are assumed to be very similar to the East Basin based on proximity and historical use and development within each basin. The East Basin has sandy sediments with low silt/clay content

(37%) (MEC and Associates 2002). Otherwise, hard substrates dominate benthic habitat of the intertidal zone in the form of docks, piers, bank protection structures, and piles associated with Port facilities.

#### 3.3.2.3 Water Column Habitats

Water column habitats in the proposed project study area include mid channel, pier and piling, and riprap. No eelgrass or kelp forests have been documented in the proposed project study area. For the purposes of determining the relative value of marine habitat for mitigation accounting, the harbor is delineated into Inner Harbor and Outer Harbor areas. The location of Inner and Outer Harbor water column habitats is shown in Figure 3.3-2.

Mid-channel habitat includes deepwater areas of the Inner and Outer Harbors without adjacent physical structures and typically overlies a soft substrate. In the proposed project study area this includes the portions of the Main, West, and East Channels. This habitat is somewhat protected from wave action but is subject to frequent boat and shipping traffic. Schooling fish and flatfish are commonly found in this habitat type.

Pier and piling habitat are prevalent along the edges of harbor channels. Surfperch and rockfish are sometimes attracted to pier and piling habitat. Vertical structures found along piers and pilings often provide points of attachment for a variety of invertebrate species including barnacles, anemones, mussels, and worms.

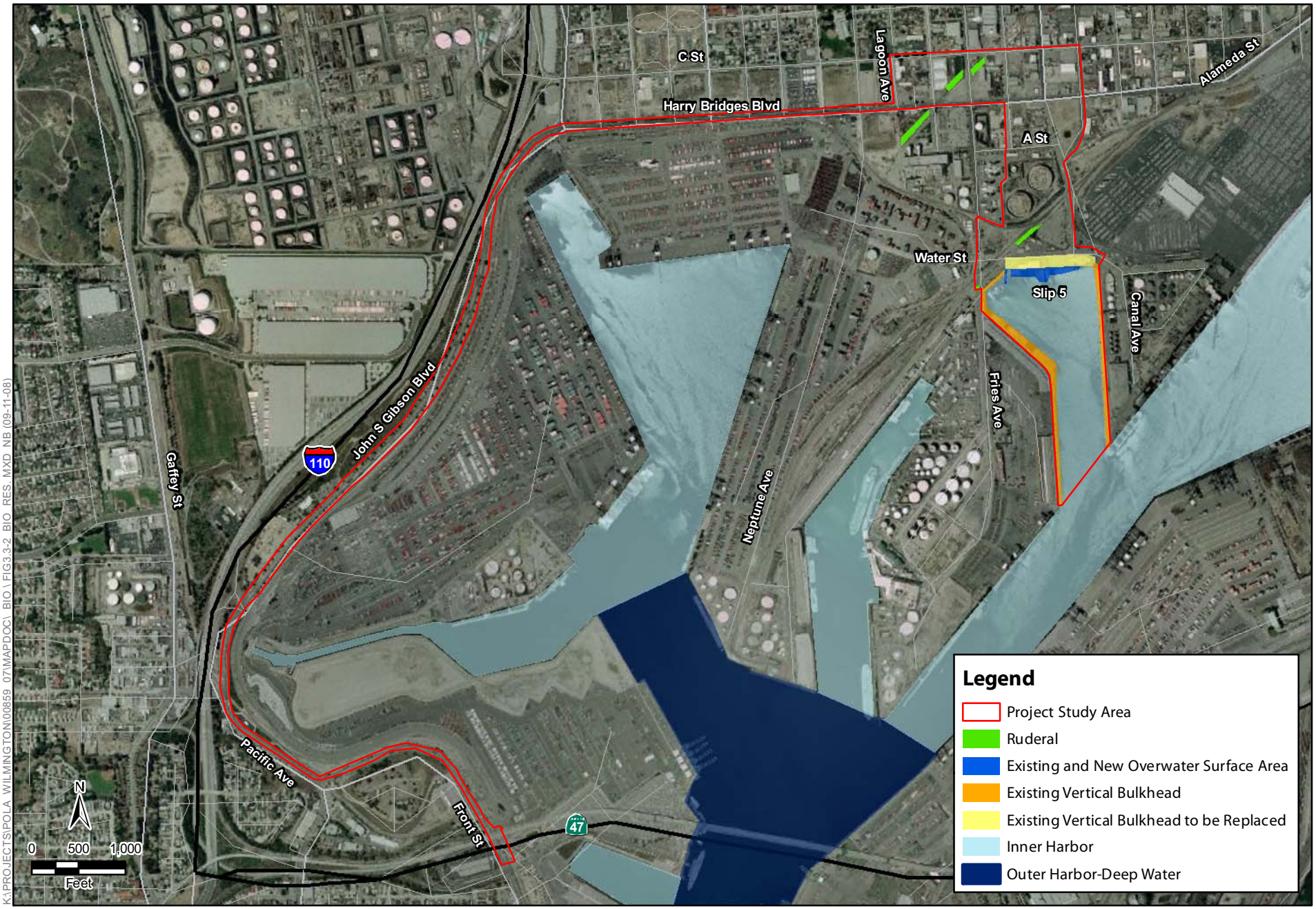
Rocky structures such as the breakwater jetty offer attachment sites for kelp and other macroalgae, as well as shelter areas favored by some rockfish species. Kelp forest habitat offers shelter habitat for several fish species.

Water column habitat associated with eelgrass is an important source of cover for juvenile fish. The invertebrate community that inhabits eelgrass beds provides food for many fish species as well. These attributes make eelgrass an important nursery area for many fish species.

However, no eelgrass or kelp forests occur within the proposed project study area (MEC and Associates 2002). Eelgrass is known to occur at two locations, both in the Outer Harbor. One eelgrass bed is located at Cabrillo Beach and another at Pier 300, both outside of the proposed project study area (MEC and Associates 2002). The plankton and fish communities occurring in the proposed project study area are discussed below.

##### 3.3.2.3.1 Plankton

Plankton is comprised of non-motile or weak swimming organisms that drift with the currents. Photosynthetic plankton species (primarily single-celled algae) are termed phytoplankton, while planktonic animals are termed zooplankton. Plankton is

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SOURCE: ESRI USA Imagery (2006)

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**Figure 3.3-2**
**Biological Resources in the Project Study Area**
**Wilmington Waterfront Development Project**

important to estuarine and other marine ecosystems as they form the base of many food webs.

Phytoplankton and zooplankton in the Los Angeles and Long Beach Harbors have been described in previous studies (Environmental Quality Analysts-MBC 1978; HEP 1976, and HEP 1979). In the Outer Harbor, seasonal phytoplankton patterns have been marked by diatom-dominated spring blooms and more intense dinoflagellate-dominated fall blooms. Species observed have been typical components of the Southern California Bight shelf plankton community (Barnett and Jahn 1987). Recent studies (MEC Analytical Systems 2002) have focused on the larval fish component of the zooplankton community (the ichthyoplankton). Ichthyoplankton monitoring within the East Basin, near Slip 5 indicates that species diversity is similar to other areas of the Inner Harbor, although the number of individuals within those species represented appears to decrease in the slips of the Inner Harbor (MEC 2002).

#### 3.3.2.3.2 Fishes

Surveys for adult and juvenile fish species within the Los Angeles Harbor recorded 74 unique species of fish (MEC 2002). Although fish populations of the entire harbor appear diverse and abundant, a large proportion of the harbor fish community is dominated by three species: white croaker (*Genyonemus lineatus*), northern anchovy (*Engraulis mordax*), and queenfish (*Seriphus politus*) (MEC Analytical Systems 2002). Four other species consistently rank high in abundance in all studies and are considered important residents of the Harbor. These are white seaperch (*Phanerodon furcatus*), California tonguefish (*Symphurus atricaudus*), speckled sanddab (*Citharichthys stigmaeus*), and shiner perch (*Cymatogaster aggregata*) (MEC Analytical Systems 2002).

Using gear designed to capture demersal (trawls), pelagic (lampara nets), and nearshore fishes (beach seines), 74 species were collected. More species were collected at shallow water (13–20 feet) locations than at deepwater (36–79 feet) locations.

Northern anchovy was the most abundant species collected with lampara net sampling (68%); white croaker, queenfish, topsmelt (*Atherinops affinis*), Pacific sardine (*Sardinops sagax*), shiner perch, and salema (*Xenistius californiensis*) also had high abundances. The five schooling species (northern anchovy, white croaker, queenfish, topsmelt, and Pacific sardine) accounted for 90% of the total abundance. The five schooling species along with bat rays (*Myliobatis californica*) and California barracuda (*Sphyraena argentea*) accounted for 77% of the total biomass in lampara samples (MEC Analytical Systems 2002).

In 2000, trawl sampling collected 61 species. Similar to lampara (pelagic) catches, three species constituted 89% of the total catch. Trawl sampling collected mostly northern anchovy, with white croaker and queenfish also having high abundances. These three schooling species along with the California halibut (*Paralichthys*

*californicus*), bat ray, and shovelnose guitarfish (*Rhinobatus productus*) accounted for 63% of the total biomass in trawl samples (MEC Analytical Systems 2002).

Beach seining was conducted at Inner Cabrillo Beach and at a beach at Pier 300 where, of the 17 species collected, topsmelt was the most abundant species; arrow goby (*Clevelandia ios*) and diamond turbot (*Pleuronichthys guttulatus*) were also commonly collected. These three species made up 95% of the total beach seine catch (MEC Analytical Systems 2002). California grunion (*Leuresthes tenuis*) spawn along beaches in the outer harbor (CDFG 2005) but are generally only present in large numbers for a few hours at a time while spawning. When spawning, grunion may dominate local fish abundance of the spawning areas.

Harbor-wide (Long Beach and Los Angeles Harbors) estimates of the total number of fish were made using recent trawl and lampara net sampling methods during the day and night. For all species combined (day and night sampling), an estimate of 4.45 million fish was estimated to occupy both harbor areas. The top five species (northern anchovy, white croaker, queenfish, topsmelt, and Pacific sardine) account for nearly 92% of the total estimated fish abundance in the harbor complex. (MEC Analytical Systems 2002)

The USFWS estimated seasonal fish densities from data collected from 1972 through 1982 (LAHD 1993). There is a trend toward higher densities in the summer and fall, ranging from 40–55 fish per 100 $m^2$, to lower densities in the winter ranging from 2–10 fish per 100 $m^2$ of surface area. Juvenile and adult individuals of most species are more abundant during the spring and summer than in winter (Horn and Allen 1981). The similarity of collections over the years suggests that there have been no long-term, large-scale changes in the harbor fish fauna (MEC Analytical Systems 2002).

The fish community in the Inner Harbor is dominated by a few species that make up a very high percentage of the total catch. The eight most abundant species collected in four surveys (summarized in USACE and LAHD 1984) are white croaker, northern anchovy, bay goby (*Lepidogobius lepidus*), queenfish, California tonguefish, white seaperch, shiner perch, and Pacific pompano (*Peprilus simillimus*). Bay goby and Pacific pompano appear more abundant in the Inner Harbor than in the Outer Harbor community. Species richness and diversity decrease along a gradient from the Outer Harbor to the Inner Harbor (USACE and LAHD 1984; MEC Analytical Systems 2002).

Similar to the decrease in species diversity observed in ichthyoplankton in the slips within the Inner Harbor, species diversity for adult and juvenile fish species also decreases to some extent within the slips. Species diversity documented in trawl surveys in the Outer Harbor ranged from 8 to 19 unique species, while the species diversity within the Inner Harbor ranged from 6 to 10 unique species. For lampara (pelagic) samples a similar decrease was noted, with 13 to 20 unique species observed in catches in the Outer Harbor, while the species diversity in the Inner Harbor ranged from 11 to 15 unique species (MEC 2002).

In general, the habitat value for fish is highest in the Outer Harbor shallow areas followed by deep water in the Outer Harbor and diminishing as one proceeds into the

Inner Harbor and particularly blind slip areas. Based on review of the last biological baseline (MEC Analytical Systems 2002) by federal and state agencies and the Port, Outer Harbor habitat values were determined to extend into historically Inner Harbor areas. Specifically, Outer Harbor habitat value now extends up the Main Channel to the area of the Vincent Thomas Bridge.

Peaks in seasonal abundance and species richness in the Inner Harbor do not coincide with Outer Harbor trends. High abundance and richness in the Inner Harbor occur in winter and early spring, and low abundance and richness occur in summer and early fall. Abundance and species richness may vary seasonally and yearly in the Outer Harbor. Outer Harbor abundance and species richness are high in late spring and early fall, peak in summer, and begin to decrease in late-fall to yearly low levels in winter. Seasonal peaks in the Outer Harbor appear to reflect juvenile/young of the year recruitment (Brewer 1983). Summer abundance peaks in the Outer Harbor may be enhanced by recruitment of Inner Harbor species (USACE and LAHD 1984).

Studies of fish larvae and fish spawning have identified trends in abundance, density, and occurrence that help to characterize the harbor in terms of a spawning and nursery grounds (Brewer 1983 and 1984; Horn and Allen 1981; MBC 1984; MEC Analytical Systems 1988; and 2002). The harbor is a viable, productive habitat for commercially and recreationally valuable species. The northern anchovy appears to be a key component in harbor ecosystem and is both a major consumer of zooplankton and a major forage food for fish of higher trophic levels. The northern anchovy uses the area inside and outside the breakwater for spawning, nursery, and adult habitat.

MEC Analytical Systems (2002) found that peaks in the abundance of larval fishes occur in spring and summer with a secondary peak in the fall. Brewer (1983) found a similarity between the abundance of fish larvae and juvenile-adults in the harbor. A large number of fish larvae and juvenile-adult species have been reported in the harbor (HEP 1979; MEC), which reflects the variety of nursery and adult habitats present.

Species composition of larval fishes varied among different areas and habitats in the harbor. Larval abundance was generally lower on the Los Angeles side of the harbor compared to the Long Beach side (MEC Analytical Systems 2002). Larvae of pelagic or demersal species found over sand and/or mud bottoms as adults generally had a wide dispersal pattern within the harbor complex. In addition, larvae of some species were strongly associated with deep-water habitats while others were strongly associated with shallow-water habitats. For example, bay goby larvae were more abundant at deep water locations. Larvae of flatfish generally had higher abundance in deep water habitats in the Outer Harbor, basins, and channels. Fish associated with aquatic vegetation and/or rocky substrate during some part of their life stage had a more localized larval distribution, which was associated with the outer breakwater, riprap around Pier 400, eelgrass beds in the Pier 300 Shallow Water Habitat, other locations near riprap, or nearby macroalgae beds (MEC Analytical Systems 2002).

### 3.3.2.4 Birds

The Los Angeles Harbor provides valuable foraging, nesting, and roosting habitats for a diverse group of birds. Water birds in this report are defined as species that rely on aquatic environs for their life-cycle requirements. These species can range from those that occur in both fresh- and marine water (e.g., herons) to those that are restricted to estuarine/marine waters (e.g., surf scoter). The most recent comprehensive study of the water birds inhabiting the Los Angeles Harbor was conducted in 2000, and included both the Los Angeles and Long Beach Harbors (MEC and Associates 2002). These studies were performed across a calendar year to provide a more complete picture of water bird habitat. They capture the temporal and spatial use of the habitat offered by these harbors by both resident and migratory bird species. This study documented 67 species of birds considered dependent on marine aquatic habitats (MEC and Associates 2002). Of those species detected, two are federally and state Endangered: the California brown pelican (*Pelecanus occidentalis californicus*) and the California least tern (*Sternula antillarum browni*). Both species are common within the harbor at the proper season.

Qualitatively, open water, riprap, dock/pilings, and boat/barges are the most abundant habitat types available to water birds within the harbors. Conversely, mudflat and sand beach habitats are the least available, and not available in the portion of the East Basin affected by the proposed Project (MEC and Associates 2002). The nearest mudflat habitat is limited to two locations: (1) Berth 78—Ports O' Call adjacent to the Fish Market and (2) the Salinas de San Pedro salt marsh area. Sand beach occurs at Inner Cabrillo Beach and along a portion of the San Pedro breakwater and portions of the East Basin east of the proposed Project. Although sand beaches can still be found along much of the southern California coastline, these areas are generally degraded as bird habitat due to trash, mechanical raking, petroleum tar, and heavy human recreational use. In contrast, mudflat habitat has declined dramatically over the last 100 years in southern California and is now limited to a small number of protected estuaries along the coastline.

The most well represented bird groups found within the harbors are gulls (e.g., western, Heermann's, California, ring-billed), terns (e.g., California least [*Sternula antillarum*], Forster's [*Sterna forsteri*], elegant [*Thalasseus elegans*], royal [*Thalasseus maximus*], Caspian [*Hydroprogne caspia*], and black skimmer [*Rynchops niger*]), California brown pelican [*Pelecanus occidentalis californicus*], and waterfowl (e.g., western grebe [*Aechmophorus occidentalis*], Brandt's [*Phalacrocorax penicillatus*] and double-crested cormorants [*Phalacrocorax auritus*], surf scoter [*Melanitta perspicillata*], and bufflehead [*Bucephala albeola*]), which when foraging would feed on fish and invertebrates. While shorebirds and wading/marsh birds occur in low abundances, those species regularly occurring include surfbird (*Aphriza virgata)*, black-bellied plover (*Pluvialis squatarola)*, western sandpiper (*Calidris mauri)*, willet (*Tringa semipalmata)*, black oystercatcher (*Haematopus bachmani)*, great blue heron (*Ardea herodias)*, and black-crowned night-heron (*Nycticorax nycticorax)*.

Within the harbor, herons and egrets (wading/marsh birds) feed along the water's edge for fish and invertebrates as well as in uplands for small mammals such as

Botta's pocket gopher (*Thomomys bottae)* and house mouse (*Mus musculus)*.. Shorebirds that occur at Los Angeles Harbor are limited to horizontally placed riprap (e.g., San Pedro breakwater), beach habitats available at Cabrillo Beach, and the small area of intertidal mudflat located at Berth 78—Ports O'Call and at the mudflat located at Salinas de San Pedro salt marsh. An exception to this is killdeer (*Charadrius vociferous)*, a shorebird that is well adapted to both aquatic and upland habitats and can be regularly found on the vacant lands within the proposed project study area.

The peregrine falcon has an extensive foraging area that covers much of the harbor as well as land to the west and the north of the harbor. The peregrine forages on other birds in the harbor such as the rock dove and the starling. However, there are no known peregrine falcon nesting areas within the harbor.

In the Inner Harbor near the Wilmington Waterfront, gulls and upland bird species were the most abundant bird guilds (9.12 and 8.41 individuals/acre, respectively) with waterfowl, aerial fish foragers and wading/marshbirds the only other species documented (0.29, 0.26, and 0.21 individuals/acre, respectively). Upland bird species were comprised primarily of rock doves, which nest under docks and piers throughout the harbor. Other upland bird species observed included 25 species, including American crow, house finches, European starlings, and barn swallows. The western gull (*Larus occidentalis*) was common all year while Heermann's gull (*Larus heermanni*) was common from June through January. Western grebes (*Aechmophorus occidentalis*) were also present throughout the year. Four species of terns and black skimmers (*Rynchops niger*) were observed in the summer. Great blue herons (*Ardea herodias*) were present along the riprap of Pier 400 all year but more abundant in fall and winter.

The California least tern (*Sternula antillarum browni*) and black skimmer are Special-Status Species (Appendix D). The elegant tern, also a special status species, was present in the harbor year round in 2000, but numbers were greatest during the summer nesting season from late April through August (MEC and Associates 2002). Elegant terns nest at five locations in North America: Pier 400 at POLA, Bolsa Chica, the San Diego Saltworks, and two islands (Isla Raza and Isla Montague) in the Gulf of California, Mexico (Collins 2006). Approximately 90 to 97% of the world population of this species nests on Isla Raza. Elegant terns, predominantly from Bolsa Chica (Collins 2006), nested in the 12-acre area adjacent to the west side of the least tern nesting area in 1998 and 2000 through 2005, with observations ranging from 166 nests in 2001 to 10,170 in 2004 (Keane Biological Consulting 2005). This area is within proposed Tank Farm Site 1 and had been cleared of vegetation through 2004 to provide additional nesting habitat for the California least tern. Approximately 2,700 elegant tern nests were present in 2005, but the terns abandoned the site after a nocturnal predator visited the site, probably moving to Bolsa Chica (Keane Biological Consulting 2005), and did not nest there in 2006 or 2007 (Keane Biological Consulting 2007a, 2007b). Caspian terns also nest at the Pier 400 site. The number breeding at each of the southern California locations has shifted considerably between years, possibly due to local water conditions (Collins 2006).

A small rookery for black-crowned night herons and great blue herons has been recorded at the Coast Guard Station at Reservation Point. Surveys conducted during June and August 2002 recorded four nests, four chicks, ten young of the year, four first-year juveniles, three second-year juveniles, and 23 adults. For great blue herons, 21 nests, 16 chicks, and two adults were recorded (MBC Applied Environmental Sciences 2000).

During April 2002 black-crowned night herons were recorded nesting at Berth 78—Ports O'Call. The data showed ten roosting adults, two used nests, and one active nest at this location. Black-crowned night heron have also been recorded utilizing the Salinas de San Pedro salt marsh, including six adults and eight first-year birds roosting, foraging, and wading near the Cabrillo Boat Launch Ramp. Two adult black-crowned night herons were recorded, with one banded as a three-week-old chick on July 2, 1996 (MBC Applied Environmental Sciences 2002).

During the 2000 baseline MEC study, the majority of bird use within the harbors was in the form of roosting (77%) followed by transiting (12%; i.e., flying over), foraging (11%), courting (0.2%), and nesting (0.1%). Most of the birds that occur within the harbor likely forage in the shallow-water habitat of the Outer Harbor as well as outside the breakwaters in near- and off-shore waters, and take refuge on the sheltered waters and riprap within the harbors. Within the proposed project study area, the Main Channel and the Cabrillo Beach area (encompassing the shallow water habitat) had the most water bird use during the 2000 baseline MEC study.

#### 3.3.2.5 Marine Mammals

Common marine mammals have not been well studied within Los Angeles Harbor; however, both pinnipeds and cetaceans have been recorded including California sea lion (*Zalophus californianus*), harbor seal (*Phoca vitulina*), pacific bottle-nose dolphin (*Tursiops truncatus*), common dolphin (*Delphinus delphis*), pacific white-sided dolphin (*Lagenorhynchus obliquidens*), Risso's dolphin (*Grampus griseus*), pacific pilot whale (*Globicephala macrorhynchus*), and gray whale (*Eschrichtius robustus*) (LAHD and Jones & Stokes 2003). The harbor's most common marine mammal is the California sea lion, which can be seen throughout the year foraging within the harbor or resting on buoys and the breakwaters of the Outer Harbor. Sea lions are commonly found on the Main Channel adjacent to the commercial fish markets and around sport fishing boats at Ports O' Call. Harbor seals are less common than sea lions, but individuals can be found sporadically throughout the year either foraging within the harbor or hauled out on riprap and buoys. Occasional observations of dolphins occur within the harbor and sightings of whales are rare (USACE and LAHD 1979).

### 3.3.2.6 Special-Status Species

All plant and wildlife species and natural communities in California that have special regulatory or management status were evaluated for potential to occur within the proposed project study area. Special Status Species are listed and their potential occurrence in the proposed project study area is described in Appendix D. All plant and wildlife species and natural communities in California that have special regulatory or management status were evaluated for potential to occur within the proposed project study area. Those identified due to their currently known general range and for which suitable habitat may, or does, exist, or that otherwise may be affected by the proposed Project, are listed and described in Appendix D. The list of Special Status Species was developed using the following steps.

1. Using a list composed of the USGS 7.5-minute Torrance, California, quadrangle map on which the proposed project study area appears (as well as the surrounding quadrangles), a check was performed for the California Natural Diversity Data Base (CNDDB) (CDFG 2008) and the California Native Plant Society's (CNPS') Electronic Inventory (CNPS 2007).
2. Using a checklist of all species in the proposed project study area region with special status, species were added as appropriate based on personal knowledge, experience with prior projects in the area, ICF Jones & Stokes internal databases, and published and unpublished references.
3. A review was performed of key publications on regulatory status and/or distribution for species relevant to the region, along with miscellaneous recent publications (e.g., Federal Register), agency announcements, popular and technical news sources (e.g., *Endangered Species and Wetlands Report*), and frequent communications with other professionals.

### 3.3.2.7 Wildlife Movement Corridors

Corridors provide specific opportunities for individual animals to disperse or migrate between other areas. These other areas may be very extensive but otherwise partially or wholly separated regions. Appropriate cover, minimum physical dimensions, and tolerably low levels of disturbance and mortality risk (e.g., limited night lighting and noise, low vehicular traffic levels) are common requirements for corridors. Resources and conditions in corridors may be quite different than in the connected areas, but if used by the wildlife species of interest, the corridor will still function as desired. Corridors adequate for one species may be quite inadequate for others. In evaluating corridors, it is important to consider the biology of those species to be addressed (Beier and Loe 1992).

The Conservation Element of the City of Los Angeles General Plan addresses wildlife corridors, which are specifically those areas used by animals for movement between large habitat areas. The harbor does not provide any such terrestrial wildlife movement corridors. There are no natural terrestrial corridors (topographic or habitat

pathways) transecting the proposed project study area, which lies at the edge of dense urban development and open water. However, some marine fish species move into and out of the harbor for spawning or nursery areas. Marine mammals, such as the gray whale, migrate along the coast, and migratory birds are visitors to the harbor.

### 3.3.2.8 Invasive Terrestrial and Marine Species

An "invasive species" is defined as a species that is (1) nonnative (or nonindigenous) to the ecosystem under consideration, and (2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Invasive species can be plants, animals, and other organisms (e.g., microbes). Human actions are the primary means of invasive species introductions.

**Terrestrial.** Based on the current field work for the proposed Project, a total of eight invasive plant species were detected: crystal ice plant (*Mesembryanthemum crystallinum*), fennel (*Foeniculum vulgare*), tocalote (*Centaurea melitensis*), black mustard (*Brassica nigra*), Australian saltbush (*Atriplex semibaccata*), castor-bean (*Ricinus communis*), giant reed (*Arundo donax*), and Spanish brome (*Bromus madritensis*). These species are relatively common to ruderal habitats found in the remaining vacant lands, illustrated in Figure 3.3-2.

**Marine.** Biological baseline monitoring (MEC and Associates 2002) has shown that nonindigenous species have become well established in the harbor benthic and epibenthic invertebrate communities. Approximately 30% of infaunal species are nonindigenous. The polychaete worm *Pseudopolydora paucibranchiata* and the bivalve mollusc *Theora lubrica* comprise 26% of total infaunal abundance. The epibenthic New Zealand bubble snail (*Philine auriformis*) is another notable nonindigenous species as it preys on other infauna and epifauna. Other exotic species of invertebrates collected in 2000 included amphipods, a clam species, mussels, and several polychaete worm species (MEC and Associates 2002). The presence of these species undoubtedly has an impact on the interactions of the species in this environment. It is not possible, however, to state definitively how these species affect ecosystem processes.

Only one exotic fish species, the yellowfin goby (*Acanthogobius flavimanus*), was collected during the 2000 baseline biological survey of the Los Angeles and Long Beach Harbors (MEC and Associates 2002). This species is thought to have been introduced from Asia with ballast water of trans-oceanic ships (Nico and Fuller 2007). It is not known how the presence of the yellowfin goby is affecting other species in the Los Angeles Harbor. However, there is concern that at some locations this species could out-compete some native species, altering fish community composition (Nico and Fuller 2007).

*Caulerpa* (*Caulerpa taxifolia*) is an invasive, nonnative green macro-algae that grows rapidly from small fragments, out-competes native species, and carpets the bottom of affected areas. *Caulerpa* infestations are thought to originate from aquarium specimens released into the natural environment (NMFS 2003). *Caulerpa* infestations can alter benthic habitat and cause serious adverse effects on nearshore

marine ecosystems. This species has been observed in two locations in California (Agua Hedionda Lagoon in northern San Diego County and Huntington Harbor in Orange County[including Seal Beach Weapons Station/National Wildlife Refuge and Anaheim Bay]) (NMFS and CDFG 2007). Since the 1980s, *Caulerpa* infestations in the Mediterranean Sea have expanded to cover large areas and may now be too widespread to eradicate. In California, *Caulerpa* distribution has been localized and at this point, controlled. Therefore, the National Marine Fisheries Service (NMFS) and DFG have established *Caulerpa* control protocols for the detection and eradication of this alga from California waters (NMFS and CDFG 2007). Bays, inlets, and harbors between Morro Bay and the U.S./Mexico border are potential habitat and need to be surveyed for *Caulerpa* presence prior to potentially disturbing activities such as dredging, in order to ensure that no *Caulerpa* is present. No *Caulerpa* has been observed in San Pedro Bay (Prickett pers. comm.) despite over 30 surveys conducted in the Port since 2001 (SCCAT 2008).

#### 3.3.2.9 Significant Ecological Area

Significant Ecological Areas (SEAs) were established in 1976 by Los Angeles County to designate areas with sensitive environmental conditions and/or resources. The County developed the concept in conjunction with adopting the original General Plan; therefore, SEAs are defined and delineated in conjunction with Land Use and Open Space Elements for the County General Plan. The County Department of Regional Planning is currently updating the SEA portion of the General Plan. Pier 400 on Terminal Island is designated a proposed SEA in the current update by the County because of the breeding population of California least tern that has been present at various Terminal Island locations since at least 1974 (Keane Biological Consulting 1999). The biology for this species has been summarized in Section 3.3.2.4, "Birds." A 15-acre nesting site is maintained on Terminal Island by the LAHD and managed under an interagency agreement among the LAHD, the USFWS, the CDFG, and the USACE (Jones & Stokes 2002). The site is protected by fencing and is designated a no-trespassing area during the nesting season.

Uses normally allowed in the corresponding classification in areas adjacent to SEAs would continue to be permitted unless a finding is made that the proposed Project would have an adverse affect on the resource values of the SEA.

## 3.3.3. Applicable Regulations

This section provides summary background information regarding the applicable regulations for protecting biological resources.

### 3.3.3.1 California Coastal Act of 1976

The California Coastal Act of 1976 recognizes the Port of Los Angeles, as well as other California ports, 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 in order to minimize any adverse environmental impacts.

Under the California Coastal Act, water areas may be diked, filled, or dredged when consistent with a certified port master plan only for specific purposes, including the following:

- construction, deepening, widening, lengthening, or maintenance of ship channel approaches, ship channels, turning basins, berthing areas, and facilities that are required for the safety and the accommodation of commerce and vessels to be served by port facilities; and
- new or expanded facilities or waterfront land for port-related facilities.

The water area proposed to be filled is to be the minimum necessary to achieve the purpose of the fill, while minimizing harmful effects to coastal resources, such as water quality, fish or wildlife resources, recreational resources, or sand transport systems, and minimizing reductions of the volume, surface area, or circulation of water.

The Act also encourages the protection and expansion of facilities for the commercial fishing industry, water-oriented recreation, and recreational boating interests. Marine resources are to be maintained, enhanced, and, where feasible, restored. The biological productivity and quality of coastal waters appropriate to maintain optimum populations of marine organisms and protect human health are to be maintained. Protection against hazardous substances spillage and effective containment and cleanup facilities and procedures are to be provided.

Under the Act, for California Coastal Commission (CCC) certification, the Port has had to develop a Port Master Plan (PMP) which addresses environmental, recreational, economic, and cargo-related concerns of the Port and surrounding regions. The proposed Project would necessitate amendments of the Los Angeles PMP and a Coastal Development Permit from the CCC.

### 3.3.3.2 Coastal Zone Management Act

Section 307 of the Coastal Zone Management Act requires that all federal agencies with activities directly affecting the coastal zone, or with development projects within that zone, comply with the state coastal acts (in this case, the California Coastal Act of 1976) to ensure that those activities or projects are consistent to the maximum extent practicable. The CCC review for the Coastal Development Permit (see Section 3.3.3.1), would include a federal consistency determination.

### 3.3.3.3 Federal Clean Water Act

The federal Clean Water Act's (CWA) purpose 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 Section 404 of the CWA. 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, sandflats, 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 above. A Section 404(b)(1) alternatives analysis must be conducted for disposal of dredge or fill material into waters of the United States.

### 3.3.3.4 Rivers and Harbors Appropriations Act of 1899

The Rivers and Harbors Appropriation Act of 1899 (33 USC 403), commonly known as the Rivers and Harbors Act, prohibits construction of any bridge, dam, dike, or causeway over or in navigable waterways of the United States without Congressional approval. Under Section 10 of the Rivers and Harbors Act, the USACE is authorized to permit structures in navigable waters. Building wharfs, piers, jetties, and other structures in or over the waters of the Port of Los Angeles requires USACE approval (Section 10 permit). When reviewing applications for Section 10 permits, the USACE reviews proposals for consistency with maintaining established navigation channels and consults with NMFS or USFWS for compliance with the Endangered Species Act (ESA) when a project may affect a federally listed species administered by one of those agencies.

### 3.3.3.5 Federal Endangered Species Act

The ESA protects plants and wildlife that are listed as endangered or threatened by the USFWS and NMFS. Section 9 of ESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging-up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law. Under Section 7 of the ESA, federal agencies are required to consult with the USFWS or NMFS as applicable 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, and concurrence from the USFWS and/or NMFS concludes the informal process. Without concurrence, the federal agency formally consults to ensure full compliance with the ESA.

#### 3.3.3.6 Federal Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation Act as revised by Public Law 104-267, the Sustainable Fisheries Act, requires fisheries management councils to describe Essential Fish Habitat (EFH) for fisheries managed under this law and requires federal agencies to consult with the NMFS on actions that may adversely affect EFH. EFHs are defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

In accordance with the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act (MSA), of the fish species managed under the MSA, 4 pelagic and 15 groundfish (demersal) species are found in the Los Angeles Harbor and are assumed to occur in the proposed project study area. These species are listed below in Table 3.3-1. The proposed Project is located within an area designated as EFH for two Fishery Management Plans (FMP), the Coastal Pelagics and Pacific Groundfish Management Plans (NMFS 1997). Four of the five species in the Coastal Pelagics FMP are well represented in the proposed project area. In particular the northern anchovy is the most abundant species in Los Angeles Harbor, representing over 80% of the fish caught (MEC 1988, 1999), and larvae of the species are also a common component of the ichthyoplankton (MEC 1988). It is generally held that this species spawns outside the harbor. There is a commercial bait fishery for northern anchovy in the Outer Harbor. The Pacific sardine is currently one of the most common species in the harbor, ranking second behind northern anchovy at some locations (MEC 1988). This species is not known to spawn in the harbor. Sardines are also a component of the commercial bait fish harvest in the harbor. Both sardines and northern anchovies are important forage for piscivorous fish. The two other coastal pelagic species, the Pacific and jack mackerels, are common but not overly abundant as adults in the harbor. The Pacific mackerel's main forage fish in the harbor is very likely northern anchovy.

Of the species present from the Pacific Groundfish FMP, only two, the olive rockfish and the scorpion fish, could be considered common in the harbor. The olive rockfish has been found largely as juveniles associated with the kelp growing along the inner edge of the federal breakwater (MEC 1988). The scorpion fish is not a major component of the fish present in the harbor (MEC 1988) but may be under-represented in the catch due to its nocturnal habits.

These species managed under the Magnuson Stevens Fishery Conservation Act that may occur in the proposed project study area are listed in Table 3.3-1.

**Table 3.3-1:** MSA Managed Species Occurring in the Port of Los Angeles and Port of Long Beach Harbors

| *Common Name* | *Species* | *Potential Essential Fish Habitat in Proposed Project Study Area* | *Abundance during 2000 Fish Surveys (Abundance at Station LA6, Nearest Sampling Station in East Basin)* |
|---|---|---|---|
| PELAGIC SPECIES (Coastal Pelagics) | | | |
| Northern Anchovy | *Engraulis mordax* | Open water throughout. | Abundant (Uncommon) |
| Pacific Sardine | *Sardinops sagax* | Open water throughout. | Abundant (Rare) |
| Pacific (Chub) Mackerel | *Scomber japonicus* | Open water, primarily at Outer Harbor; juveniles off of sandy beaches and around kelp beds. | Common (Absent) |
| Jack Mackerel | *Trachurus symmetricus* | Near breakwater. Young fish over shallow rocky banks. Young juveniles sometimes school under kelp. Older fish typically further offshore. | Common (Common) |
| DEMERSAL SPECIES (Pacific Groundfish) | | | |
| English Sole | *Parophrys vetulus* | On bottom throughout. Benthic on sand or silt substrate. | Rare (Absent) |
| Pacific Sanddab | *Citharichthys sordidus* | On bottom throughout. Benthic on sand or coarser substrate. | Uncommon (Rare) |
| Leopard Shark | *Triakis semifasciata* | Primarily in Outer Harbor. Over sandy areas near eelgrass, kelp, or jetty areas. | Rare (Absent) |
| Big Skate | *Raja binoculata* | Primarily in Outer Harbor. Over variety of substrates generally at >3 m depth. | Rare (Uncommon) |
| Black Rockfish | *Sebastes melanops* | Along breakwater and deep piers and pilings. Associated with kelp, pilings, eelgrass, and high relief rock. | Uncommon (Absent) |
| California Scorpionfish | *Sebastes paucispinus* | Benthic and often associated with kelp, reefs, and rocky bottoms. | Uncommon (Absent) |
| Grass Rockfish | *Sebastes rastrelliger* | Along breakwater and in eelgrass off of beach areas. Associated with kelp, | Rare |

| *Common Name* | *Species* | *Potential Essential Fish Habitat in Proposed Project Study Area* | *Abundance during 2000 Fish Surveys (Abundance at Station LA6, Nearest Sampling Station in East Basin)* |
|---|---|---|---|
| | | eelgrass, jetty rocks. | (Absent) |
| Vermilion Rockfish | *Sebastes miniatus* | Primarily along breakwater. Typically near bottom and associated with kelp, along drop offs, and over hard bottom. | Rare (Absent) |
| Cabezon | *Scoraenichthys marmoratus* | Primarily along breakwater and eelgrass areas. Benthic and use a variety of substrates including kelp beds, jetties, rocky bottoms, and occasionally eelgrass beds and sandy bottoms. | Rare (Absent) |
| Lingcod | *Ophiodon elongatus* | Primarily along breakwater and especially near Angels Gate. Typically on or near bottom over soft substrate near current swept reefs. | Rare (Absent) |
| Bocaccio | *Sebastes paucispinis* | Typically found in deeper water near hard substrate, kelp, and algae. | Uncommon (Absent) |
| Kelp Rockfish | *Sebastes atrovirens* | Found in association with kelp along the breakwaters. | Rare (Absent) |
| Olive Rockfish | *Sebastes serranoides* | Found in association with kelp along the breakwaters. | Common (Absent) |
| Calico Rockfish | *Sebastes dalli* | Typically found in deeper water near hard substrate, kelp, and algae. | Rare (Absent) |
| California Skate | *Raja inornata* | Usually associated with hard substrate. Found along breakwater and deep piers and pilings. Associated with kelp, pilings, eelgrass, and high-relief rock. | Uncommon (Absent) |

Notes:

Potential habitat use from McCain et al. 2005. Species occurrence in Los Angeles and/or Long Beach Harbors recorded by MEC and Associates (2002).
Abundant = among ten most abundant species collected.
Common = not one of the ten most abundant, but at least 100 individuals collected.
Uncommon = between 10 and 100 individuals collected.
Rare = less than 10 individuals collected.
Pelagic and benthic sampling employed in the 2000 surveys (MEC 2002) did not sample rocky breakwater, and kelp habitat that could potentially be occupied by some of the species would not have been sampled.

Source: MEC Analytical Systems 2002.

### 3.3.3.7 Migratory Bird Treaty Act and State Fish and Game Code §3503.5 and §3800

The federal Migratory Bird Treaty Act (MBTA) prohibits take of nearly all native birds. Under the MBTA, "take" means only to kill, directly harm, or destroy individuals, eggs, or nests, or to otherwise cause failure of an ongoing nesting effort. Permits are available under the MBTA through USFWS.

Similar provisions within the California Fish and Game Code (FGC) protect all native birds of prey (FGC §3503.5) and all non-game birds, where not already listed as Fully Protected, which occur naturally in the state (FGC §3800), although fines are somewhat smaller than at the federal level.

### 3.3.3.8 California Fish and Game Code Section 1600

Under Fish and Game Code Section 1602, the CDFG has authority to regulate work that will substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a "Lake or Streambed Alteration Agreement" and is applicable to all non-federal projects.

A stream is defined in current CDFG regulations as, "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation."

Water features such as vernal pools and other seasonal swales, where the defined bed and bank are absent and the feature is not contiguous or closely adjacent to other jurisdictional features, are generally not asserted to fall within state jurisdiction. The state generally does not assert jurisdiction over manmade water bodies unless they are located where such natural features were previously located or (importantly) where they are contiguous with existing or prior natural jurisdictional areas.

### 3.3.3.9 California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Section 2050 *et seq*.) provides for the protection of rare, threatened, and endangered plants and animals, as recognized by the CDFG, and prohibits the taking of such species without authorization by CDFG under Section 2081 of the Fish and Game Code. State lead agencies must consult with CDFG during the CEQA process if state-listed threatened or endangered species are present and could be affected by the proposed Project. For projects that could affect species that are both state and

federally listed, compliance with the federal ESA will satisfy CESA if CDFG determines that the federal incidental take authorization is consistent with CESA under Fish and Game Code Section 2080.1.

### 3.3.3.10 Federal Ballast Water Management Directed under the Non-Indigenous Species Act

The Non-indigenous Aquatic Nuisance Prevention and Control Act of 1990 (P.L. 101-646) identified ballast water as a significant environmental issue. In 1996, the act was reauthorized as the National Invasive Species Act (P.L. 104-332), and the Secretary of Transportation was directed to develop national guidelines to prevent the spread and introduction of non-indigenous aquatic species through the ballast water of commercial vessels. Subsequently the International Maritime Organization developed the Guidelines for the Control and Management of Ship's Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens (International Maritime Organization [IMO] Resolution A.868 (20), which was adopted November 1997). In 2004, the U.S. Coast Guard published requirements for mandatory ballast water management practices for all vessels equipped with ballast water tanks bound for ports or places within the U.S. or entering U.S. waters (69 FR 44952-44961).

California PRC Section 71200 et seq. requires ballast water management practices for all vessels, domestic and foreign, carrying ballast water into waters of the state after operating outside the Exclusive Economic Zone (EEZ). Specifically, the regulation prohibits ships from discharging ballast water within port waters unless they have performed an exchange outside the EEZ in deep, open ocean waters. Alternatively, ships may retain water while in port, discharge to an approved reception facility, or implement other similar protective measures. Each ship must also develop a ballast water management plan to minimize the amount of ballast water discharged in the port. The Act also requires an analysis of other vectors for release of nonnative species from vessels. Rules for vessels originating within the Pacific Coast Region took effect in March 2006. Ships must now exchange ballast water on coast-wise voyages. Regulations currently under consideration for future years (2009–2022) will require phase-in of ballast water treatment performance standards, first for newly constructed ships and then for existing ships. An important distinction between the federal ballast water guidelines and those specified in the California code is that the California code mandates certain best management practices (BMPs) for managing ballast-water to reduce introductions of non-indigenous species.

### 3.3.3.11 State Authority under the Federal Clean Water Act, Sections 401 and 402

Through the authority of the State Water Resources Control Board (SWRCB) as handled by the various Regional Water Quality Control Boards (RWQCBs), the state administers requirements and permitting under Sections 401 and 402 of the federal

CWA through agreement with the U.S. Environmental Protection Agency (EPA). If an activity may result in the discharge of dredge or fill material into a waterbody, the 401 process is triggered and state water quality certification (or waiver of certification) that the proposed activity will not violate state water quality standards is required.

In addition to Section 401 requirements, some projects will be subject to compliance with Section 402 of the CWA in accordance with the National Pollutant Discharge Elimination System (NPDES). The process for compliance with this provision is normally perfunctory with notification and fee payment under the State General Permit for Construction Period discharges. However, construction activity must conform to BMPs in accordance with a written Stormwater Pollution Prevention Plan, which may be subject to local agency review prior to issuance of grading permits.

### 3.3.3.12 California Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of CESA and ESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, mammals, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under CESA and/or ESA. The regulations that implement the Fully Protected Species Statute (Fish and Game Code Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFG prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

### 3.3.3.13 Federal Marine Mammal Protection Act of 1972

The Marine Mammal Protection Act (MMPA) prohibits, with certain exceptions, the take of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. Congress passed the MMPA based on the following findings and policies: (1) some marine mammal species or stocks may be in danger of extinction or depletion as a result of human activities, (2) these species of stocks must not be permitted to fall below their optimum sustainable population level (depleted), (3) measures should be taken to replenish these species or stocks, (4) there is inadequate knowledge of the ecology and population dynamics, and (5) marine mammals have proven to be resources of great international significance.

The MMPA was amended substantially in 1994 to provide for: (1) certain exceptions to the take prohibitions, such as for Alaska Native subsistence and permits and authorizations for scientific research; (2) a program to authorize and control the taking of marine mammals incidental to commercial fishing operations; (3) preparation of stock assessments for all marine mammal stocks in waters under U.S.

jurisdiction; and (4) studies of pinniped-fishery interactions. NMFS and the USFWS administer this Act. Species found in the harbor are under the jurisdiction of NMFS.

### 3.3.3.14 Executive Order 13112

On February 3, 1999, Executive Order 13112 was signed establishing the National Invasive Species Council. The Executive Order requires that a Council of Departments dealing with invasive species be created. Currently there are 12 departments and agencies on the council. The Constitution and the laws of the United States of America, including the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), Non Indigenous Aquatic Nuisance Prevention and Control Act of 1990, as amended (16 U.S.C. 4701 et seq.), Lacey Act, as amended (18 U.S.C. 42), Federal Plant Pest Act (7 U.S.C. 150aa et seq.), Federal Noxious Weed Act of 1974, as amended (7 U.S.C. 2801 et seq.), Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), and other pertinent statutes, are to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause.

Each Federal agency whose actions may affect the status of invasive species will, to the extent practicable and permitted by law:

1. identify such actions;
2. subject to the availability of appropriations, and within Administration budgetary limits, use relevant programs and authorities to (a) prevent the introduction of invasive species; (b) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; (c) monitor invasive species populations accurately and reliably; (d) provide for restoration of native species and habitat conditions in ecosystems that have been invaded; (e) conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and (f) promote public education on invasive species and the means to address them; and 3) not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.

### 3.3.3.15 Porter-Cologne Water Quality Act

Under the state Porter-Cologne Water Quality Control Act, the SWRCB and regional boards assert jurisdiction over many discharges into, waters of the state. Where resources are subject to both state and federal regulations, Porter-Cologne

compliance is coordinated with CWA Section 401 water quality certification. For situations not also subject to federal regulation under CWA, an activity affecting waters of the state may require issuance of individual Waste Discharge Requirements (WDRs), or coverage under the General Waste Discharge Requirements (SWRCB Water Quality Order No. 2004-0004-DWQ) for small volume fill and dredge projects.

Dischargers whose construction project disturbs 1 or more acres of soil, or whose project disturbs less than 1 acre but is part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ). Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Section A of the Construction General Permit describes the elements that must be contained in a SWPPP.

## 3.3.4 Impact Analysis

This section describes the methodology for assessing potential impacts and assesses the potential for significant impacts on biological resources based on the described thresholds of significance.

### 3.3.4.1 Methodology

The current biological setting, described above, was based on the biological surveys reported in a number of documents, including the TraPac Berths 136–147 Terminal EIS/EIR (LAHD and USACE 2007 ), Cabrillo Marina Phase II Development Project Supplemental EIS/EIR (Jones & Stokes 2002), baseline studies in Los Angeles Harbor (MEC Analytical Systems 1988), Long Beach Harbor (MBC Applied Environmental Sciences 1984), and Year 2000 surveys of San Pedro Bay (Los Angeles and Long Beach Harbors; MEC and Associates 2002). Impacts on species, communities, and habitats expected to occur as a result of proposed project implementation were identified by analyzing the change that would occur under the proposed project description in view of the existing biological setting.

#### 3.3.4.1.1 Special Consideration with CEQA Baseline

Section 15125 of the CEQA Guidelines requires EIRs to include a description of the physical environmental conditions in the vicinity of a project that exist at the time of the NOP. These environmental conditions would normally constitute the baseline physical conditions by which the CEQA lead agency determines whether an impact is

significant. For purposes of this draft EIR, the CEQA Baseline for determining the significance of potential impacts under CEQA is March 2008. CEQA Baseline conditions were described above in Section 3.3.2, "Environmental Setting." However, for some biological resources, such as local nesting populations of special-status birds (Appendix D), considerable variability can occur from year to year for a variety of reasons. Thus, using only one year, such as the year the NOP was issued, as the baseline may not be representative of conditions expected to be present before the proposed Project is implemented. Consequently, for birds that nest or have nested in the vicinity of the proposed project study area, such as the California least tern, elegant tern, great blue heron, and black-crowned night heron, more than one year has been considered in determining representative baseline conditions.

#### 3.3.4.1.2 Mitigation Framework for Proposed Project Impacts

As mentioned previously in this chapter, the marine habitat value is highest in the Outer Harbor shallow areas followed by deep water in the Outer Harbor and diminishing as one proceeds into the Inner Harbor and particularly blind slip areas. Based on review of the last biological baseline (MEC Analytical Systems 2002) by federal and state agencies and the Port, Outer Harbor habitat values were determined to extend into historically Inner Harbor areas. Specifically, Outer Harbor habitat value now extends up the Main Channel to the area of the Vincent Thomas Bridge.

Any loss of marine habitat requires mitigation. The LAHD entered into MOUs with several resource agencies that established mitigation banks and assigned credits to the mitigation banks and a system of debiting against those credits for impacts within both the Inner and Outer Harbor. Because the value of the marine habitat of Outer Harbor is greater than the Inner Harbor, Outer Harbor credits are more "expensive." For example, 1 acre of impact to deep Outer Harbor marine habitat must debit 1 credit from the mitigation bank, whereas 1 acre of impact to the Inner Harbor marine habitat must debit 0.5 credit from the mitigation bank. The proposed Project is located within the Inner Harbor, within a blind slip, which has the lowest habitat value. Thus for each acre of impact associated with the Project, 0.5 credit must be debited from the mitigation bank.

### 3.3.4.2 Thresholds of Significance

Thresholds of significance for biota and habitats are based on the *L.A. CEQA Thresholds* (City of Los Angeles 2006). This guide does not specifically address aquatic habitats within the harbor. The LAHD therefore has developed harbor-specific significance criteria for permanent loss of biological habitats. A significant impact on biota or habitats in the proposed project area would occur if the proposed Project results in the following:

**BIO-1**: The loss of individuals, or the reduction of existing habitat, of a state- or federally listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or the loss of federally listed critical habitat.

**BIO-2**: A substantial reduction or alteration of a state-, federally, or locally designated natural habitat, special aquatic site, or plant community, including wetlands.

**BIO-3**: Interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a species.

**BIO-4**: A substantial disruption of local biological communities (e.g., from construction impacts or the introduction of noise, light, or invasive species).

**BIO-5:** A permanent loss of marine habitat.

## 3.3.4.3 Impacts and Mitigation

Biological impacts of the proposed Project are described in this section. Potential effects of the proposed Project on biological resources are described and a detailed analysis of the potential to affect each identified threshold of significance is discussed.

### 3.3.4.3.1 Construction Impacts

#### Impact BIO-1a: Construction activities would not cause a loss of individuals, or the reduction of existing habitat, of a state- or federally listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or the loss of federally listed critical habitat.

The proposed Project would include the construction of a waterfront promenade, public viewing piers, and 5,870-square-feet of floating docks for recreational boaters, which would include the construction of 43,220 square feet of new overwater surface area and approximately 17,880 square feet of replacement area. In total, 61,100 square feet of pile-supported waterfront promenade and piers would be constructed. However, total new shaded area would be 41,325 square feet due to the design feature of adding 7,765 square feet of metal grating to permit solar light pass-through. Approximately 750 new and 478 replacement pilings would be required to support the promenade and piers.

The proposed Project would also reconstruct the existing bulkhead, which is an old, piecemeal structure that does not meet current seismic design standards. Two different structural systems would be used to reconstruct the bulkhead: (1) a deep soil-cement mixing landward of the existing bulkhead, with no work waterward of the existing bulkhead, and (2) a sheet pile bulkhead, located waterward of the existing bulkhead. The first system would be used to the maximum extent possible and would reinforce the majority of the length of the existing bulkhead, from the eastern end to the 45-degree break in the layout line at the western end. The second

system would be used for the approximately 290 lineal feet of bulkhead west of the 45-degree break, where significant utilities immediately behind the bulkhead wall prevent the use of deep soil-cement mixing. This second system would require the filling of approximately 2,200 square feet (0.05-acres) of marine habitat below the mean higher high water (MHHW) line. The sheet pile bulkhead would require the sheet pile be driven using both a vibratory and an impact pile driver.

Pile driving produces underwater noise levels of 177 to 220 dB (re 1 µPa) at 33 feet depending on material and size of piles (Hastings and Popper 2005). Installing 24-inch concrete piling with an impact hammer pile driver typically generates 192 $dB_{peak}$, or roughly 172 to 182$dB_{RMS}$ at 33 feet at the full force of the pile driver. The soft start technique will be employed for all pile driving activities. The soft start technique requires that the initial strikes of a piling with an impact type pile driver are not performed at full force, but at a significantly reduced force and slowly build to full force over several strikes. This method provides opportunity for species that may occur in the vicinity of the pile driving activities to effectively move to another area away from the pile driving, thus limiting the effects of pile driving to disturbance and avoiding injury. With the exception of pile driving, underwater noise levels associated with construction activities would be below the Level A harassment (potential to injure) level of 180 $dB_{rms}$ (re 1 µPa) for marine mammals (Federal Register 2005). Sound pressure waves in the water caused by pile driving could affect the hearing of marine mammals (e.g., sea lions) swimming in the Inner Harbor. Observations during pile driving for the San Francisco–Oakland Bay Bridge East Span seismic safety project showed sea lions swam rapidly out of the area when the piles were being driven (Caltrans 2001). Thus, sea lions would be expected to avoid areas where sound pressure waves could affect them. Harbor seals are unlikely to be present as few have been observed in the Inner Harbor areas (MEC and Associates 2002). Any seals or sea lions present during construction would likely avoid the disturbance areas and thus would not be injured. No other protected or sensitive marine species normally occur in the proposed project area.

Foraging in the Project study area could continue with no adverse effects to avian species. The peregrine falcon feeds on other birds (e.g., rock dove, starlings, etc.) and would not be affected by proposed project activities because no prey would be lost and only a small amount of potential foraging area would be temporarily affected. The peregrine falcon foraging area extends for miles (Grinnell and Miller 1986) and thus covers much of the harbor as well as land areas to the west and north. No known peregrine falcon nesting areas (Vincent Thomas and Schuyler F. Heim Bridges) would be affected due to distance from the proposed project activities. The Vincent Thomas Bridge is over 1.25 mile and the Schuyler R. Heim Bridge is over 1.15 mile from the proposed Project. The backland areas (Avalon Development District) are not used by sensitive species for resting, foraging (except potentially by the peregrine falcon), or breeding, and thus none of these species would be present to be affected by proposed project construction activities.

Other sensitive species in the harbor that could use the water surface and on-shore facilities include the double-crested cormorant, black skimmer, elegant tern, California gull, long-billed curlew, and common loon (Appendix D). The black skimmer, long-billed curlew, and common loon are not common in the harbor while

the other three species can be abundant in some seasons (MEC and Associates 2002). No nesting habitat exists at the proposed project site for any of these species, so their presence at or near the proposed project site would be for the purposes of feeding in the harbor waters, resting on the water surface, or roosting on structures. These species would be able to use other areas within the Inner Harbor if construction activities occurred when they were present and if the disturbances caused them to avoid the work area. In addition, to comply with the MBTA, which prohibits take of migratory birds, and/or similar provisions of the California Fish and Game Code (i.e., native birds including but not limited to the black-crowned night heron), nesting surveys would be conducted if construction would take place during the breeding seasons (February 15 through September 1). If active nests are found, a 100-foot radius would be established around the active nests to prohibit construction activities in this area. Thus, no individuals would be lost and their populations would not be adversely affected by construction activities.

Marine species of concern (NMFS 2007a) that may be found in the proposed project study area include cowcod, bocaccio, green abalone, and pink abalone. Cowcod and bocaccio are generally found at depths greater than 69 feet (21 meters) (McCain et al. 2005); therefore, these species are not expected to be present within the Inner Harbor and were not collected in the last MEC baseline marine biology surveys (MEC Analytical Systems 2002.

#### Impact Determination

As described above, construction activities on land and in the water would result in no loss of individuals or habitat for rare, threatened, endangered, protected, or candidate species, or Species of Special Concern, and sound pressure waves from construction activities in the water would not injure such species. Impacts would, therefore, be less than significant. Furthermore, no critical habitat for federally listed species is present; thus no impacts would occur.

#### Mitigation Measures

No mitigation is required.

#### Residual Impacts

Impacts would be less than significant.

### Impact BIO-2a: Construction activities would not result in a substantial reduction or alteration of a state-, federally, or locally designated natural habitat, special aquatic site, or plant community, including wetlands.

#### Essential Fish Habitat

The proposed Project would have minimal effects on the Fisheries Management Plan (FMP) species that are rare or uncommon, such as Pacific mackerel and English sole

(MEC and Associates 2002), because few if any individuals would be expected in the proposed project area.

The most common FMP species present in the Inner Harbor are northern anchovy, Pacific sardine, and jack mackerel (MEC and Associates 2002). Pile installation and construction of the waterfront promenade could temporarily affect these FMP species through habitat disturbance associated with pile driving activities and vibration (sound pressure waves) from pile driving. Installing 24-inch concrete piling with an impact hammer pile driver typically generates 192 $dB_{peak}$, or roughly 172 to 182$dB_{RMS}$. The soft start technique will be employed for all pile driving activities. The soft start technique requires that the first strikes of a piling with an impact type pile driver are not performed at full force, but at a significantly reduced force and slowly build to full force over several strikes. This method provides any species (both aquatic and terrestrial) that may occur in the vicinity of the pile driving activities to effectively move to another area away from the pile driving, thus avoiding the limiting the effects of pile driving to disturbance and avoiding injury.

These effects would be temporary, occurring at intervals lasting approximately 1 to 88 days during the 24-month construction period, with a return to baseline conditions between construction activities and following completion of proposed project construction. However, the area along the Wilmington Waterfront is already affected by boat docks, floats, and shading from existing over-water walks, buildings, and vertical walls; therefore, the proposed Project's additional in-water structures are considered adverse, but not significant impacts. The proposed Project would result in the loss of 2,200 square feet (0.05 acres) of habitat in Slip 5, which accounts for approximately 0.12% of the habitat provided in Slip 5 at an elevation of 4.8 Mean Lower Low Water (MLLW). The loss of 0.05 acres of Inner Harbor habitat would be mitigated by debiting the appropriate credits from the Inner Harbor Mitigation Bank, as governed by the Memorandum of Understanding (MOU) to establish a procedure for advance compensation of marine habitat losses incurred by selected Port development projects within the Harbor District of the City of Los Angeles (City of Los Angeles 1984).

The proposed Project would result in an increase of 43,220 square feet of new over water surface area as a result of construction of the waterfront promenade and piers. The area affected would be within the intertidal zone and shaded by the wharf so that little change to EFH would accrue from the new overwater surface area. Disturbances in the water column during waterfront promenade and pier construction activities would affect individuals of FMP species present in those areas during in-water construction activities (e.g. pile driving), as described previously under Impact BIO-1a. These impacts are not considered to be significant, as they would likely be limited to behavioral changes (i.e., avoidance of the construction area).

The deep soil–cement mixing system for reconstructing the bulkhead wall would not impact habitat conditions within Slip 5, and would be employed as an avoidance measure to reduce the loss of habitat. The sheet pile system for the western portion of the wall reconstruction would remove approximately 2,200 square feet (0.05 acres) of habitat in front of the existing bulkhead. This reduction in habitat would be mitigated through the Port's Inner Harbor Mitigation Bank and is not expected to

have a significant impact on habitat conditions or species in the proposed project study area. The habitat along the base of the existing bulkhead is currently comprised of rock slope protection, interspersed with timber pile stubs. Any loss of aquatic marine habitat in the harbor is considered a significant impact on marine resources, including EFH for those Pacific groundfish and coastal pelagic species that occur in the harbor. As a result, the loss of aquatic marine habitat requires mitigation per the MOU between the Harbor Department of the City of Los Angeles and resource agencies.

Construction activities on land (including the conversion of currently developed industrial/commercial uses to public oriented improvements) would have no direct effects on EFH, which is located in the water. Runoff of sediments from such construction, however, could enter harbor waters. Appropriate construction BMPs, such as sediment fencing and temporary erosion and sediment control measures would be employed to minimize potential impacts on water quality associated with construction runoff. Further discussion is provided in Section 3.14, "Water Quality, Sediments, and Oceanography."

### Natural Habitat or Plant Community

No kelp or eelgrass beds are present in the proposed project study area, and those in other parts of the harbor, outside the proposed project study area, would not be affected by proposed project construction due to their distance from the proposed Project. No designated SEAs, including the least tern nesting site on Pier 400, would be affected by the proposed Project because no construction activities would take place at or near the only SEA in the harbor. No wetlands (including salt marsh) or mudflats would be affected because none are present within the area that could be influenced by proposed project construction activities. The closest such habitats are more than 3 miles from the proposed Project.

### Impact Determination

Construction activities in the backlands (Avalon Development District) and for road improvements would have no direct impacts on EFH or other natural habitats because none are present. Indirect impacts through runoff of sediments during storm events would be less than significant because such runoff would be controlled as described for water quality in Section 3.14, "Water Quality, Sediments, and Oceanography" (e.g., proposed project–specific SWPPP with BMPs such as sediment barriers and sedimentation basins). No impacts on SEAs, kelp beds, eelgrass beds, wetlands, or mudflats would occur because none of these habitats are present at or near the proposed project site.

The proposed Project would result in the loss of 0.05 acres of aquatic marine habitat within the Inner Harbor. The loss of this habitat would be considered a significant effect upon aquatic marine resources including EFH for Pacific groundfish and coastal pelagic species that occur in the harbor. This impact would be mitigated in accordance with established interagency mitigation requirements, as described previously in this section.

Mitigation Measures

**MM BIO 1. Debit Inner Harbor Mitigation Bank.**

The loss of 2,200 square feet (0.05 acres) of Inner Harbor marine habitat will be mitigated by debiting the required credits from the Inner Harbor Mitigation Bank, per the terms and conditions established in the MOU between LAHD, CDFG, NMFS, and USFWS (City of Los Angeles 1984). The MOU provides that for each acre of marine habitat impacted within the Inner Harbor the mitigation bank will be debited 0.5 credit. Thus the 0.05 acre of marine habitat impacted in the Inner Harbor will result in a debit from the mitigation bank of 0.025 credit.

Residual Impacts

Impacts would be less than significant.

## Impact BIO-3a: Construction activities would not result in the interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a species.

No known terrestrial wildlife or aquatic species migration corridors are present in the proposed project area. The California least tern is a migratory bird species that nests on Pier 400. Construction of proposed project facilities in the East Basin and on the adjacent backlands would not interfere with the aerial migration of this species. Movement to and from foraging areas in the harbor also would not be affected by any of the proposed project construction activities. The western snowy plover is also a migratory species, and a few migrating individuals have been observed at the least tern nesting site in recent years. Individual adults of the California brown pelican move to breeding sites in Mexico and to offshore islands for part of the year. A number of other water-related birds that are present at least seasonally in the harbor are migratory as well. Construction activities in the East Basin and on the adjacent lands would not block or interfere with migration or movement of any of these species because the work would be confined to a small portion of the harbor area, and the birds could easily fly around or over the work.

### Impact Determination

No wildlife movement or migration corridors would be affected by the proposed Project during construction activities on land and in the water as described above. No impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

## Impact BIO-4a: Construction activities would not result in substantial disruption of local biological communities (e.g., from construction impacts or the introduction of noise, light, or invasive species).

Construction of a new waterfront promenade and associated piers would add up to 43,220 square feet of new water surface area and remove and reconstruct up to 17,880 square feet of surface area within the proposed project area. The water affected would be within the intertidal zone and shaded by the new overwater structures. Approximately 1228 piles would be installed in the water for the new structures (750 new piles and 478 replacement piles).

Reconstruction of the western portion of the bulkhead using sheet piles would result in the loss of approximately 2,200 square feet (0.05 acres) of aquatic habitat below the MHHW line. The deep soil–cement mixing system would not result in any loss of aquatic habitat waterward of the existing bulkhead and thus not affect aquatic biological communities.

Construction of the waterfront promenade and piers, as well as conversion of currently developed areas, could affect biological resources through: (1) turbidity, noise, and vibration generated by work in harbor waters; and (2) runoff of sediments from terrestrial construction sites. Noise and vibration from pile driving will be in the range of 192 $dB_{peak}$, or roughly 172 to 182$dB_{RMS}$. Proposed project construction is expected to generate turbidity, but not to levels that could result in a substantial disruption of biological communities. Turbidity, noise, and vibration (primarily from pile driving) would likely cause most fish and birds to temporarily leave the immediate project area during construction. Fish and bird populations would not be adversely affected because the small number of individuals occurring in the affected area would likely move temporarily into other adjacent areas, the disturbance would be of short duration, and the relatively small area affected would not substantially disrupt biological communities within Slip 5 or the Inner Harbor. Backland and road improvement activities would have minimal effect on terrestrial biota because the species present are nonnative and/or adapted to use of developed sites. Disturbances to marine species would be temporary, and the animals present could move to other nearby areas for the duration of the disturbance. Consequently, local biological communities of this industrial area would not be substantially disrupted.

The loss of approximately 2,200 square-feet (0.05 acres) of aquatic marine habitat, which extends only to 4.8 feet MLLW, would not substantially disrupt local biological communities. This loss represents only 0.12 % of the marine habitat area of Slip 5 (as measured at 4.8 MLLW). The loss of this area would be mitigated through use of the Port's Inner Harbor Mitigation Bank.

Concrete pier decks constructed using cast in place techniquesdo pose a risk of increased alkaline runoff. Runoff of sediments and pollutants from backland construction activities would be minimized through the use of BMPs (see Section 3.14, "Water Quality, Sediments, and Oceanography" and Impact WQ-4a-1), and the low concentrations that could enter harbor waters would meet all regulatory standards and would not adversely affect marine organisms.

### Impact Determination

Construction activities in the backlands would result in no substantial disruption of local biological communities for the reasons described above, and impacts would, therefore, be less than significant. Runoff of sediments and pollutants from backland construction activities would not substantially disrupt biological communities in the East Basin and would have only localized, short-term, less–than-significant impacts on marine organisms in the immediate vicinity of drain outlets due to implementation of runoff control measures that are part of the proposed Project (e.g., proposed project–specific SWPPP and BMPs such as sediment barriers and sedimentation basins; see Section 3.14.4.3 for a list of measures). A notice to proceed will not be issued without approval of the specific SWPPP and BMPs by the Port engineers.

The sheet pile bulkhead system for reconstructing the western portion of the existing bulkhead would result in the loss of 2,200 square feet (0.05 acres) of aquatic marine habitat, or 0.12% of the aquatic marine habitat within Slip 5, which would disrupt the biological communities that exist within that area through the direct loss of habitat, but would not substantially disrupt the biological communities within the East Basin or the Inner Harbor. The reconstruction of the remainder of the existing bulkhead with the deep soil–cement mixing system would result in no loss of aquatic habitat, and thus would not cause any substantial disruption to biological communities, as no work waterward of the existing bulkhead would be required for this option. Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Residual Impacts

Impacts would be less than significant.

## Impact BIO-5a: Construction of the proposed Project would not result in a permanent loss of marine habitat.

Construction of the proposed Project would result in permanent changes to the proposed project area that would increase shading through the addition of 43,220 square feet of overwater structures. This change in ambient light would not affect eelgrass, kelp, or other aquatic vegetation or macroalgae, as these types of aquatic vegetation are not present in the proposed project study area.

The replacement of the existing bulkhead with the sheet pile option would result in the permanent loss of 2,200 square feet (0.05 acres) of marine habitat. The replacement with the deep soil–cement option would not result in any permanent loss of marine habitat. Overall, the habitat that would be removed by the sheet pile option has a diminished habitat value, as it is located relatively deep in the Inner Harbor. Mitigation for loss of inner harbor habitat would occur through the debit of the required mitigation credits from the Port's Inner Harbor Mitigation Bank.

#### Impact Determination

The proposed Project would add 43,220 square feet of overwater structures to the proposed project area. This change in ambient light would not affect eelgrass, kelp, or other aquatic vegetation or macroalgae. Additionally, the proposed Project would result in the permanent loss of 2,200 square feet (0.05 acres) of marine habitat.

The loss of 0.05-acres of Inner Harbor marine habitat is considered a significant impact and would be mitigated through established mitigation protocols using the Port's Inner Harbor Mitigation Bank (see Appendix D).

#### Mitigation Measures

Implement Mitigation Measure MM BIO-1.

#### Residual Impacts

While the proposed Project would result in the permanent loss of marine habitat at the proposed project site, use of credits associated with the Port's Inner Harbor Mitigation Bank accumulated from previous preservation activities would offset the small reduction in marine habitat associated with the proposed Project and would therefore not result in an overall permanent reduction of marine habitat within the Port. After mitigation, impacts would be less than significant.

## 3.3.4.3.2 Operational Impacts

### Impact BIO-1b: Operational activities associated with the proposed Project would not cause a loss of individuals, or the reduction of existing habitat, of a state- or federally listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or the loss of federally listed critical habitat.

Operation of the proposed Project would not cause any loss of individuals or habitat of state- or federally listed species or critical habitat. Operation of the proposed Project would consist of maintenance activities (cleaning, sweeping, replacing fixtures, painting, etc.) and use of the facilities developed as part of the proposed Project (e.g., park and open space, commercial and retail space, and other public

facilities) that would encourage public access to the waterfront. The proposed Project would also result in use of the waterfront by recreational boaters. The floating docks allow for 9 vessels averaging 30 feet in length. A water taxi may also operate from the floating docks at some point in the future. As a worst-case scenario, it is estimated that, as a result of the proposed Project, there would be approximately 36 recreational boat trips and possibly a water taxi program that could be developed at a later time (no such program is currently proposed, and any future water taxi program will be covered under a separate CEQA analysis). Such activities would not result in the loss of individuals of protected species or their critical habitat.

#### Impact Determination

As described above, operational activities would not result in the loss of individuals or habitat for rare, threatened, endangered, protected, or candidate species, or Species of Special Concern. Impacts would, therefore, be less than significant. No critical habitat for federally listed species is present, and no impacts would occur.

#### Mitigation Measures

No mitigation is required.

#### Residual Impacts

Impacts would be less than significant.

### Impact BIO-2b: Operational activities associated with the proposed Project would not result in a substantial reduction or alteration of a state-, federally, or locally designated natural habitat, special aquatic site, or plant community, including wetlands.

Operational activities associated with the proposed Project would have no impact on state-, federally, or locally designated natural habitats, special aquatic sites, or plant communities, including wetlands. Operational activities would maintain the structures built during the construction phase and ensure that the longevity of those structures is maximized. Recreational use of the new facilities would not result in any reduction or alteration of state-, federally, or locally designated natural habitats, special aquatic sites, or plant communities. No expansion or increase in facilities would result from operational activities, thus there would be no reduction or alteration of natural habitats, special aquatic sites, or plant communities, including wetlands.

#### Impact Determination

Operational activities would not result in permanent loss of marine habitat.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

## Impact BIO-3b: Operational activities associated with the proposed Project would not result in interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a species.

Operational activities associated with the proposed Project would not interfere with wildlife movement/migration corridors because such activities would consist primarily of maintenance activities and public use of the waterfront. No changes in wildlife movement or migration would occur as a result of operational activities.

### Impact Determination

No wildlife movement or migration corridors would be affected by the operation and maintenance of the proposed Project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

## Impact BIO-4b: Operational activities associated with the proposed Project would not result in a substantial disruption of local biological communities (e.g, from construction impacts or the introduction of noise, light, or invasive species).

Operational activities associated with the proposed Project would not substantially disrupt local biological communities. Anticipated increases in boat traffic associated with the proposed Project would include 36 boat trips per day, on average, to and from the floating docks. A total of 9 boats averaging 30 feet in length would be able to moor at the floating docks at one time. Increased boat traffic is not anticipated to result in significant impacts on local biological communities. No expansion or increase in facilities would result from operational activities.

**Impact Determination**

Operational activities in waters of the East Basin and on the backlands would not result in any substantial disruption of local biological communities for the reasons described above. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

### Impact BIO-5b: Operational activities associated with the proposed Project would not result in a permanent loss of marine habitat.

Operational activities associated with the proposed Project would not result in any permanent loss of marine habitat. Operational activities would consist of maintenance and public use of the facilities constructed as part of the proposed Project and an increase in recreational boat traffic of 36 recreational boat trips per day, on average. A water taxi program may be added by the Port in the future, and the program would be covered under a separate CEQA process; thus no water taxi traffic is assumed in this analysis.

**Impact Determination**

The operation of the proposed Project would not result in any permanent loss of marine habitat; thus, no impact would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

## 3.3.4.3.3 Summary of Impact Determinations

Table 3.3-2 summarizes the impact determinations of the proposed Project related to Biological Resources, as described in the detailed discussion in Sections 3.3.4.3.1 and 3.3.4.3.2. Identified potential impacts may be based on federal, state, and City of Los Angeles significance criteria, LAHD criteria, and the scientific judgment of the report preparers.

For each type of potential impact, the table describes the impact, notes the impact determinations, describes any applicable mitigation measures, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in this table.

**Table 3.3-2:** Summary Matrix of Potential Impacts and Mitigation Measures for Biological Resources Associated with the Proposed Project

| *Environmental Impacts* | *Impact Determination* | *Mitigation Measures* | *Impacts after Mitigation* |
|---|---|---|---|
| **3.3 Biological Resources** | | | |
| **Construction** | | | |
| **BIO-1a:** Construction activities would not cause a loss of individuals, or the reduction of existing habitat of a state- or federally listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern, or the loss of federally listed critical habitat. | Less than significant | No mitigation is required | Less than significant |
| **BIO-2a:** Construction activities would not result in a substantial reduction or alteration of a state-, federally, or locally designated natural habitat, special aquatic site, or plant community, including wetlands. | Significant | **MM BIO 1. Debit Inner Harbor Mitigation Bank.**<br>The loss of 2,200 square feet (0.05 acres) of Inner Harbor marine habitat will be mitigated by debiting the required credits from the Inner Harbor Mitigation Bank, per the terms and conditions established in the MOU between LAHD, CDFG, NMFS, and USFWS (City of Los Angeles 1984). The MOU provides that for each acre of marine habitat impacted within the Inner Harbor the mitigation bank will be debited 0.5 credit. Thus the 0.05 acre of marine habitat impacted in the Inner Harbor will result in a debit from the mitigation bank of 0.025 credit. | Less than significant |

| | | | |
|---|---|---|---|
| **BIO-3a:** Construction activities would not result in the interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a species. | No impact would occur | No mitigation is required | No impact would occur |
| **BIO-4a:** Construction activities would not result in substantial disruption of local biological communities (e.g., from construction impacts or the introduction of noise, light, or invasive species). | Less than significant | No mitigation is required | Less than significant |
| **BIO-5a:** Construction of the proposed Project would not result in a permanent loss of marine habitat. | Significant | Implement Mitigation Measure MM BIO-1. | Less than significant |
| **Operations** | | | |
| **BIO-1b:** Operational activities associated with the proposed Project would not cause a loss of individuals, or the reduction of existing habitat, of a state- or federally listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern, or the loss of federally listed critical habitat. | Less than significant | No mitigation is required | Less than significant |
| **BIO-2b**: Operational activities associated with the proposed Project would not result in a substantial reduction or alteration of a state-, federally, or locally designated natural habitat, special aquatic site, or plant community, including wetlands. | No impact would occur | No mitigation is required | No impact would occur |

| | | | |
|---|---|---|---|
| **BIO-3b:** Operational activities associated with the proposed Project would not interfere with wildlife movement/migration corridors that may diminish the chances for long-term survival of a species. | No impact would occur | No mitigation is required | No impact would occur |
| **BIO-4b:** Operational activities associated with the proposed Project would not substantially disrupt local biological communities (e.g, from construction impacts or the introduction of noise, light, or invasive species). | Less than significant | No mitigation is required | Less than significant |
| **BIO-5b:** Operational activities associated with the proposed Project would not result in a permanent loss of marine habitat. | No impact would occur | No mitigation is required | No impact would occur |

### 3.3.4.4 Mitigation Monitoring

**Table 3.3-3:** Mitigation Monitoring for Biological Resources

| | |
|---|---|
| **BIO-2a:** Construction activities would not result in a substantial reduction or alteration of a state-, federally, or locally designated natural habitat, special aquatic site, or plant community, including wetlands. | |
| Mitigation Measure | **MM BIO 1. Debit Inner Harbor Mitigation Bank.** |
| Timing | Prior to initiating construction |
| Methodology | Deduction of built up habitat credits from the Inner Harbor Mitigation Bank would offset 0.05 acres of marine habitat being permanently removed |
| Responsible Parties | LAHD and Responsible agencies |
| Residual Impacts | Less than significant |
| **BIO-5a:** Construction of the proposed Project would not result in a permanent loss of marine habitat. | |
| Mitigation Measure | Implement mitigation measure **MM BIO 1: Debit Inner Harbor Mitigation Bank**. |
| Timing | Prior to initiating construction at the waterfront |
| Methodology | Deduction of built up habitat credits from the Inner Harbor Mitigation Bank would offset 0.05 acres of marine habitat being permanently removed |
| Responsible Parties | LAHD and Responsible agencies |
| Residual Impacts | Less than significant |

## 3.3.5 Significant Unavoidable Impacts

No significant unavoidable impacts on biological resources would occur during construction or operation of the proposed Project.