

# 3.3

## BIOLOGICAL RESOURCES

### 3.3.1 Introduction

### 3.3.2 Environmental Setting

#### 3.3.2.2 Benthic Environments

##### 3.3.2.2.1 Soft Bottom Habitats

Organisms that live on and in the bottom sediments act to modify the character of the bottom. Those that live in the sediments, primarily invertebrate species, are referred to as infauna, while those living on the sediment surface are referred to as epifauna. These species are important as a food source for fish, crabs, and other benthic organisms. Since the 1950s, improvements in water quality have aided the establishment of diverse assemblages of benthic animals in previously disturbed Inner Harbor and channel areas (USACE and LAHD 1980, 1984). Data from the 1970s show that the polychaete *Tharyx parvus* accounted for most of the benthic organisms in soft bottom samples (~~HEP 1976~~ ~~(Allan Hancock Foundation 1980)~~ [Soule and Oguri 1976](#); USACE and LAHD 1980). An assessment of dominant species in the Harbor indicates a gradient of increasing environmental stress (enrichment/contamination) from the Outer to Inner Harbor and from basins to slips (MEC [and Associates](#) 2002). Over time there has been an increasing tendency of movement of healthy Outer Harbor assemblages up the main channel and improved benthic indicators in the Inner Harbor areas (MEC [and Associates](#) 2002). Between 1990 and 2003, more than 350 infaunal invertebrate species have been collected during routine monitoring in the West Basin area, although only 20 species have contributed 1 percent or more to the total abundance in the area (MBC 2003). The soft bottom benthos of the West Basin is generally dominated by polychaete annelids (worms), with crustaceans and mollusks moderately abundant and other taxa less abundant. Polychaetes were still numerically dominant in the Berth 137 area and remain the most speciose (having the greatest number of species) taxonomic group throughout the West Basin (MBC 2003). However, in 2003 the Asian clam (*Theora lubrica*), a mollusk, was the dominant species near Berth 145 and was the most abundant single species throughout the West Basin area (MBC 2003). The abundance of non-native species such as the Asian clam has increased throughout the Los Angeles and Long Beach Harbor complex since the

1970s, and at least six of 25 infaunal species known to have been introduced into the Harbor are found in the West Basin (MEC and Associates 2002).

### 3.3.2.3 Water Column Habitats

The Los Angeles-Long Beach Harbor complex is a habitat for over 130 species of juvenile and adult fish, some of them transient visitors and some permanent residents (Horn and Allen 1981, MEC 1988, USACE and LAHD 1980). Several species, however, dominate fish populations in the Harbor: white croaker, northern anchovy, queenfish, Pacific sardine (*Sardinops sagax*), and topsmelt (*Atherinops affinis*) (Brewer 1983, MEC and Associates 2002). Four other species are also relatively abundant and are considered important residents of the Harbor: white seaperch (*Phanerodon furcatus*), California tonguefish (*Symphurus atricauda*), speckled sanddab, and shiner perch (*Cymatogaster aggregata*) (Horn and Allen 1981). Juvenile and adult individuals of most species are more abundant during the spring and summer than in winter (Horn and Allen 1981). The Harbor does include commercially important species including the California halibut (*Paralichthys californicus*), the barred sand bass (*Paralabrax nebulifer*), and California barracuda (*Synodus argentea*).

### 3.3.2.5 Special-Status Species

#### 3.3.2.5.2 California Brown Pelican

The California brown pelican was federally listed as endangered in 1970 and was state listed as endangered in 1971. Low reproductive success attributed to pesticide contamination that caused thinning of eggshells was the primary reason for their listing. After use of DDT was prohibited in 1970, the population began to recover (USACE and LAHD 1992). The California brown pelicans' abundance has climbed since surveys conducted in 1973 found them to comprise only 3.8 percent of the total bird observations in the ports ([Allan Hancock Foundation— 1980](#)~~HEP-1980~~). The only breeding locations in the U.S. are at West Anacapa Island and Santa Barbara Island, although a few have begun nesting at the south end of the Salton Sea (CDFG 2005, Patten et al. 2003). Breeding also occurs at offshore islands and along the mainland of Mexico.

Brown pelicans use the Harbor year-round, but their abundance is greatest in the summer when post-breeding birds from Mexico arrive. The highest numbers are present between early July and early November, when several thousand can be present (MBC 1984). Pelicans use all parts of the Harbor, but they prefer to roost and rest on the Harbor breakwater dikes, particularly the Middle Breakwater (MBC 1984, MEC 1988, and MEC and Associates 2002). They forage over open waters for fish such as the northern anchovy, and accounted for 9.5 percent of the total number of birds observed in the Harbor during the 2000-2001 surveys. Several were observed in the West Basin in July through September 2000 with few to none the remainder of the year (MEC and Associates 2002). [However, the Inner Harbor, which includes the West Basin, is not considered an important area for California brown pelican foraging based on survey information.](#) The brown pelican does not breed in the Harbor area.

### 3.3.2.10 Wetlands and Other Special Habitats

#### 3.3.2.10.4 Mudflats

The shoreline at and near the proposed Project site is rock riprap with wharves. No mudflats are present [at the proposed Project site](#). [However, mudflats are present at Berth 78 along the Main Channel adjacent to the route used by vessels entering and leaving the West Basin.](#)

### 3.3.3 Applicable Regulations

### 3.3.4 Impacts and Mitigation Measures

#### 3.3.4.3 Impacts and Mitigations

##### 3.3.4.3.1 Proposed Project

##### 3.3.4.3.1.1 Construction Impacts

**Impact BIO-1a: Construction activities would not cause a loss of individuals or 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.**

Dredging and filling as well as backland improvements and wharf construction/reconstruction activities would be unlikely to affect listed, candidate, or special concern species through temporary increases in noise, vibration, and turbidity, as well as the potential for displacement of individuals from the work area. No critical habitat for any federally-listed species is present. The Inner Harbor is not considered an important area for California least tern or California brown pelican foraging based on survey information (see Sections 3.3.2.5.1 and 3.3.2.5.2). The proposed Project area also does not provide any other habitat values for the [California](#) least tern and provides only limited perching/resting sites for the [California](#) brown pelican. Dredging/filling activities and the resultant temporary turbidity would affect few if any individuals of these species because few could be present, and other foraging areas are available nearby in the West Basin and in other areas of the Harbor if construction disturbances cause them to avoid the work areas. Foraging in the proposed Project area could also continue with no adverse effects to either 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 0.5 mile (0.8 km) from Berth 147 and ~~over~~ [more than](#) 1.2 miles (1.9 km) from Northwest Slip, and the Schuyler R. Heim Bridge is ~~over~~ [more than](#) 2 miles (3.2 km) from the West Basin. The backland areas and the area of the Harry Bridges Boulevard widening and Harry Bridges Buffer Area project, a component of the

proposed Project, 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.

[California brown pelicans, marine mammals, and sea turtles are unlikely to be present at the ocean dredged material disposal sites. Any individuals that are present when disposal related to the proposed Project takes place would avoid the disturbance and would not be adversely affected \(USEPA 1987, 2005\).](#)

Rock for construction of the new or rebuilt dike face at Berths 145-147 and for containing the Northwest Slip fill would be transported from a Catalina Island quarry by barge. The Berths 145-147 work would require two barges per day for ~~410.5~~ days, and the Northwest Slip fill dike would require 2 barges per day for ~~243.5~~ days. These two activities would not occur concurrently. Two barges per day from Catalina Island to the West Basin would not adversely affect marine mammals in the ocean or in the Outer Harbor and Main Channel because few if any individuals would be present in these vessel traffic routes due to their sparse distribution in the open ocean (whales, porpoises/dolphins, seals, and sea lions) and in the Harbor (sea lions and harbor seals only) as well as their agility and ability to avoid damage by vessels.

The USACE has made a “no effect” determination for federally-listed species in accordance with requirements of Section 7 of the ESA. [Because the 10-acre fill would not be constructed until 2015 or later, the Port would have a qualified biologist survey the Project area for presence/use by federally listed species no more than 6 months prior to initiating the fill. If federally listed species are observed within the area during the survey, Section 7 consultation with the USFWS might be required.](#)

### **CEQA Impact Determination**

As described above, construction activities on land and in the water, [including ocean disposal of dredged material](#), 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 marine mammals; impacts would, therefore, be less than significant under CEQA. No critical habitat for federally-listed species is present, and no impacts would occur.

### *Mitigation Measures*

No mitigation is required.

### *Residual Impacts*

Residual impacts would be less than significant.

### **NEPA Impact Determination**

As described above, in-water [\(including ocean disposal of dredged material\)](#) and the Northwest Slip fill construction activities 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 marine mammals; therefore, impacts would be less than significant

under NEPA. Backland construction activities on the existing backlands are part of the No Federal Action/NEPA Baseline and thus would not result in impacts described for the CEQA analysis. No impacts would occur.

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Residual impacts would be less than significant for in-water work, and no residual impacts would occur for backlands construction.

**Impact BIO-2a: Construction activities would 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 no effect on the FMP species that do not occur in the West Basin, and minimal effects on those that are rare or uncommon, such as Pacific mackerel and English sole (MEC and Associates 2002), because few if any individuals would be in the disturbance area. The loss of water column habitat due to placement of fill (9.5 acres; 3.9 ha), however, would result in a loss of habitat and food sources for the FMP species that use the Northwest Slip. The loss of habitat would not likely have a measurable effect on sustainable fisheries because it would not measurably reduce the stocks of these species in the areas where they are harvested (primarily off shore in the open ocean). Loss of habitat for pelagic fish species that might use the Northwest Slip, particularly northern anchovy, would be considered a substantial effect that would be mitigated in accordance with established mitigation requirements as described in **Impact BIO-5**. The most common FMP species present are northern anchovy, Pacific sardine, and jack mackerel (MEC and Associates 2002). Dredging, pile removal, and wharf construction/upgrades at Berths 136-147 also could affect these FMP species through habitat disturbance (e.g., pile removal and rock riprap placement), turbidity and suspension of contaminants from the sediments associated with dredging along the berths and disposal of the material, and vibration (sound pressure waves) from pile and sheetpile driving. 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 construction (see Section 3.13 for discussion of turbidity duration). No permanent loss of habitat would occur from the wharf work, [although soft bottom habitat would be converted to rocky habitat at Berth 147](#), and few if any individual fish would be lost because most individuals would avoid the work area, resulting in no loss of sustainable fisheries.

Demolition and reconstruction of the wharf at Berths 146-147 would result in a net increase of about 0.3 acre (0.1 ha) of water surface under the wharf as a result of slope reconstruction for the new wharf at Berth 147. The water would be within the intertidal zone and shaded by the wharf so that little EFH benefit would accrue from the small amount of new water column habitat. Disturbances in the water column during wharf construction activities at Berths 145-147 would affect individuals of FMP species present in those areas during the in-water construction phase as described above.

[Disposal of dredged material at the LA-2 or LA-3 ocean disposal sites would result in a temporary disturbance in the water column during the disposal process. Fish would move out of the disturbance area during the disposal but no permanent habitat loss would occur and no mortality of fish would be expected \(USEPA 1987, 2005\). Thus, use of these disposal sites would not adversely affect EFH.](#)

Construction activities on land (including the Harry Bridges Boulevard widening, buffer area, and railyard relocation) would have no direct effects on EFH, which is [entirely](#) located in the water. Runoff of sediments from such construction, however, could enter Harbor waters. As discussed in Section 3.13, implementation of sediment control measures (e.g., sediment barriers and sedimentation basins) would minimize such runoff.

### ***Natural Habitat or Plant Community***

No kelp or eelgrass beds are present in the proposed Project area, and those in other parts of the Harbor would not be affected by construction activities in the Berths 136-147 area 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~~ [eelgrass beds and salt marsh](#) are more than three miles (4.8 km) from the proposed Project. [Mudflats are located nearly two miles \(3.2 km\) from the proposed Project site along the Main Channel.](#)

### **CEQA Impact Determination**

Filling of the Northwest Slip would result in a permanent loss of Inner Harbor marine habitat and a reduction of EFH in the West Basin, a significant impact under CEQA. Dredging and wharf construction activities, [as well as ocean disposal of dredged material,](#) would cause temporary disturbances, but no substantial alteration, to habitat for FMP species that would be less than significant for the reasons described above. Construction activities in the backlands, including the railyard relocation, and for road improvements (Harry Bridges Boulevard widening and buffer area) 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 3.13 (e.g., project-specific SWPPP with BMPs such as sediment barriers and sedimentation basins). No impacts to SEAs, kelp beds, eelgrass beds, wetlands, or mudflats would occur because none of these habitats are present at or near the proposed Project site.

### ***Mitigation Measures***

**Mitigation Measure BIO-1** (see **Impact BIO-5** for detailed description) would apply to this EFH impact. Mitigation of the filling of 9.5 acres (3.9 ha) of Inner Harbor marine habitat would require credit from either the Bolsa Chica Mitigation Agreement or the Outer Harbor Mitigation Bank. This mitigation measure would fully offset proposed Project impacts to EFH sustainable fisheries and loss of general marine habitat (see **Impact BIO-5**). No mitigation is required for impacts to natural habitats, special aquatic sites, or plant communities.



*Residual Impacts*

The mitigation credits would compensate for the loss of EFH as a result of the proposed Project, leaving no residual impact. No residual impacts would occur for natural habitats, special aquatic sties, or plant communities.

**NEPA Impact Determination**

Filling of the Northwest Slip would result in a permanent loss of Inner Harbor marine habitat and a reduction of EFH in the West Basin, as described above for CEQA, which would be a significant impact under NEPA. Impacts would be less than significant for other in-water construction activities (e.g., wharf construction/reconstruction, [and dredging, and ocean disposal of dredged material](#)). Runoff of sediments from the Northwest Slip fill during storm events would be less than significant because such runoff would be controlled as described for water quality in Section 3.13 (e.g., project-specific SWPPP with BMPs such as sediment barriers and sedimentation basins). No impacts to SEAs, kelp beds, eelgrass beds, wetlands, or mudflats would occur because none are present at or near the proposed Project site. Backland construction activities on existing backlands, the railyard relocation, and Harry Bridges Boulevard widening and [Buffer aArea](#) are all part of the No Federal Action/NEPA Baseline and thus would not result in impacts described for the CEQA analysis. No impacts would occur.

*Mitigation Measures*

**Mitigation Measure BIO-1** would apply to this impact. Mitigation of the filling of 9.5 acres (3.9 ha) of Inner Harbor marine habitat would require credit from either the Bolsa Chica Mitigation Agreement or the Outer Harbor Mitigation Bank. This mitigation measure would fully offset proposed Project impacts to EFH sustainable fisheries and loss of general marine habitat (see **Impact BIO-5** below).

*Residual Impacts*

The mitigation credits would compensate for the loss of EFH as a result of the proposed Project, leaving no residual impact.

**Impact BIO-4a: Dredging, filling, and wharf construction activities would not substantially disrupt local biological communities.**

*Dredging*

Dredging for the proposed wharf upgrade and new wharf at Berths 146-147 would deepen approximately 3.6 acres (1.5 ha) of soft bottom habitat in a linear strip approximately 1,700 feet (518 m) long and permanently remove 1.1 acres (0.5 ha) in Phase I (Table 3.3-3). [This dredging would also result in a slight increase in water column habitat.](#) At Berths 136-139, Phase I dredging would affect about 2.3 acres (0.9 ha). About 0.3 acre (0.1 ha) would be dredged to key-in the dike for the Northwest Slip fill in Phase II. Benthic invertebrates living in and on the sediments to be dredged adjacent to the berths would be lost. At a biomass of 21 grams/square meter (g/m<sup>2</sup>), approximately 0.5 metric ton of invertebrates living in the sediments would be removed. The habitat would be altered by making it permanently deeper through dredging, but the newly exposed sediments would be colonized by invertebrates, especially polychaetes,

beginning immediately after the dredging stops in each location. A community similar to that currently present would develop within 2 to 5 years (Soule and Oguri 1976, MEC 1988) in the localized area of disturbance. Because a small proportion of the soft bottom in the West Basin would be affected by the dredging, the benthic community in the West Basin or the Harbor would not be disrupted. The replacement of soft bottom with rocky dike would permanently remove 0.1 metric tons of invertebrates, but the rocky dike would be colonized by a diverse assemblage of marine organisms at a higher biomass (41 to over 3,000 g/m<sup>2</sup>; LAHD 1981, MEC and Associates 2002) than that found in the soft bottom sediments (21 g/m<sup>2</sup>; MEC and Associates 2002) based on observed biomass of organisms in/on those habitats.

**Table 3.3-3. Berth 136-147 Habitat Impact Summary (in acres)**

Construction Phase	Location	PERMANENT IMPACTS			TEMPORARY IMPACTS	
		Soft Bottom	Rocky Dike/ Sheet Pile	Water Surface	Soft Bottom	Hard Bottom
I	Berths 145-147 (wharf improvements)	-1.1	+1.8	+0.3	3.6	0.6
I	Berths 136-139 (dredging)	—	+0.6	—	2.3	—
II	The Northwest Slip (10-ac fill)	-7.6	-2.5	-9.5	0.3	1.7
II	Berth 136 (400' extension)	—	—	—	—	—
	<b>Total Berths 136-147</b>	<b>-8.7</b>	<b>-0.1</b>	<b>-9.2</b>	<b>6.2</b>	<b>2.3</b>

*Notes:* Acreages are approximate and are based on a water surface elevation of +4.8 feet MLLW.

Benthic organisms in a narrow strip of soft bottom areas adjacent to the dredging and on the riprap, piles, and bulkheads along the berths would be subjected to temporary disturbances from turbidity and sediment resuspension and deposition generated by dredging. Lethal and sub-lethal effects that could occur include direct mortality, arrested development, reduction in growth, reduced ingestion, depressed filtration rate, and increased mucous secretion. Some benthic organisms could be buried by sediments settling on them while others would be able to move upward as the sediments accumulate. Effects of turbidity and sediment deposition on the benthic habitat would be temporary with rapid recovery of the benthic communities that reside in the sediments, and the West Basin benthic community would not be substantially disrupted over the long term.

Removal of the top layer of sediment which, in some areas, contains accumulated contaminants and sediments deposited over time from numerous sources, including terrestrial inputs such as stormwater runoff and aerial deposition, would decrease the potential for bioaccumulation of contaminants in aquatic organisms residing in the West Basin if the lower layers that are exposed by the dredging are not also contaminated. Thus, placing the contaminated sediments in a landfill or confined disposal facility (CDF) ~~would provide an overall~~-benefit to ~~organisms-water quality and organisms~~ in the West Basin and the Harbor as a whole, by removing a pollutant source in a small area. However, the Northwest Slip fill would result in a net loss of habitat for organisms within the food web (see Impact BIO-5).



[Disposal of dredged material at LA-2 or LA-3 would bury or disturb benthic organisms where the material is deposited. The new sediments would be colonized by benthic organisms from adjacent areas or settlement from the water column. The deposition of sediments would also result in the loss of a negligible amount of offshore water column habitat. These effects would not disrupt benthic communities over the long term and have been described and evaluated in the EISs for designation of the disposal sites \(USEPA 1987, 2005\).](#)

#### *Northwest Slip Fill*

Effects of constructing the 10-acre (4-ha) fill in the Northwest Slip are addressed above under **Impact BIO-1** relative to sensitive species. For common marine species (benthos, plankton, fish), the loss of marine habitat in the Northwest Slip would result in a loss of marine productivity approximately equal to the proportion of Inner Harbor marine habitat lost (less than one percent). These habitats are already highly modified/channelized due to past port developments, and thus have lower ecological functions and values than open ocean or even Outer Harbor habitats (MEC and Associates 2002) as described in the mitigation credit agreements (e.g., LAHD 1997). [The loss of marine habitat would not adversely affect the food web because no important foraging, breeding, or rearing areas for marine species would be lost.](#) Consequently, loss of marine habitat through filling the Northwest Slip would not substantially disrupt biological communities in the West Basin or the Inner Harbor. Turbidity resulting from the filling operation could affect plankton and fish in the same manner as described for dredging. However, the location would be within and immediately adjacent to the Northwest Slip, and the duration would be 25 days. This short duration and limited area of effect would not adversely affect the West Basin biological community as a whole.

As described in Section 3.13, construction of the new landfill would have minor effects on water quality and circulation. Consequently, temporary, localized variations in water quality would not adversely affect West Basin biological communities.

#### *Wharf and Backland Construction*

Construction of a new 705-foot (215-m) wharf at Berth 147 would add approximately 1.5 acres (0.6 ha) of new rocky dike hard substrate habitat, while upgrades at Berths 145-146 would add about 0.3 acre (0.1 ha) of vertical sheet pile habitat. Approximately 0.6 acre (0.2 ha) of rocky dike would be removed and replaced for a temporary, localized impact. Demolition and reconstruction of the wharf at Berths 146-147 would result in a net increase of about 0.3 acre (0.1 ha) of water surface under the wharf. The water would be within the intertidal zone and shaded by the wharf, so that only marginal aquatic habitat benefit would accrue from the small amount of new water column created. Approximately 275 new concrete piles would be installed in the water for the new [705-foot](#) wharf, and another 319 piles (not all in water) would be installed as part of the existing wharf upgrades. At Berths 136-139, about 0.6 acre (0.2 ha) of vertical sheet pile habitat would be added prior to dredging between the pierhead line and the Federal channel. Construction of the new 400-foot (123-m) wharf extension at Berth 136 would add about 215 new piles in the water. The new pilings, installed to support these wharves and the sheet pile at Berths 136-139 and 145-146, would add hard substrate habitat in the West Basin. Removal of 770 timber pilings at Berth 147 and 360 concrete pilings from partial demolition of the wharf at Berth 146 would reduce the amount and type of piling habitat in the water column. The installation of about 490 concrete piles (Berths 146-147

plus Berth 136 extension) would partially offset this loss. The piles would be placed in existing or new riprap areas. In new riprap areas, few benthic organisms would be lost because little colonization of the rock would have occurred by the time of pile installation. In existing riprap areas, the organisms within the footprint of each pile would be lost or disturbed. The surface of the piles in the water would replace the hard substrate benthic habitat lost within the pile footprints. The new piles would convert a small amount of water column habitat into hard substrate habitat.

Construction of wharf and container terminal facilities on the new landfill, as well as construction on previously developed areas, could affect biological resources through: (1) noise and vibration, and (2) runoff of pollutants. Turbidity, noise, and vibration (primarily from pile driving) would likely cause most fish and birds to temporarily leave the immediate construction area. Fish and bird populations would not be adversely affected because the small number of individuals moving into other areas, the short duration of the disturbance, and the small area affected would not substantially disrupt West Basin biological communities. Backland and road improvement activities, including the railyard relocation and Harry Bridges Boulevard widening and buffer area, would have minimal effect on terrestrial biota because the species present are non-native 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.

Runoff of pollutants from backland construction activities would be minimized through use of best management practices (BMPs) (see Section 3.13), and the low concentrations that could enter Harbor waters would not adversely affect marine organisms.

#### *Accidents*

Accidents on land could result in runoff of pollutants, but levels that could adversely affect aquatic biota near the point of discharge to the Harbor are unlikely due to containment, rapid cleanup, and implementation of runoff control measures as described in **Impact WQ-1d**.

Accidental spills of fuel, lubricants, or hydraulic fluid from the equipment used during dredging and disposal of the material are unlikely to occur during the proposed Project (see Section 3.13 **Impact WQ-1d**) and adversely affect aquatic biota to the degree that local biological communities are not substantially disrupted. Any such spills would be small and cleaned up immediately, resulting in loss of only a few common marine organisms and causing no adverse effects on biological communities as a whole. A larger spill that could have locally substantial effects on biological resources is not expected to occur, even under reasonable worst-case conditions (see Section 3.7, Hazards). Accidental spills of pollutants during construction on land would be small because large quantities of such substances would not be used during construction. These spills would be contained and cleaned up with no runoff to Harbor waters (see Section 3.13).

### **CEQA Impact Determination**

Construction activities in waters of the West Basin and on 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 pollutants from backland construction activities would not substantially disrupt biological communities in the West 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., project-specific SWPPP and BMPs such as sediment barriers and sedimentation basins – see Section 3.13.4.3 for a list of measures). Accidental spills from equipment during dredging would not substantially disrupt local biological communities because they would be small, contained, cleaned up immediately, and affect only a few common marine organisms, and thus would have localized, less than significant impacts. Accidental spills during construction on land would not reach Harbor waters due to the implementation of BMPs, and thus would have no impacts on marine communities. No notice to proceed would be issued without approval of the specific SWPPP and BMPs. [Disposal of dredged material at the USEPA-approved LA-2 or LA-3 ocean disposal sites would not substantially disrupt biological communities at those offshore sites, and impacts would be less than significant.](#)

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Residual impacts would be less than significant.

### **NEPA Impact Determination**

Construction activities in waters of the West Basin and on the Northwest Slip fill would result in no substantial disruption of West Basin biological communities for the reasons described above, and impacts, therefore, would be less than significant. Backland construction activities on existing lands would be part of the No Federal Action/NEPA Baseline and thus would not result in impacts described for the CEQA analysis. No impacts would occur. [Disposal of dredged material at the USEPA-approved LA-2 or LA-3 ocean disposal sites would not substantially disrupt biological communities at those offshore sites, and impacts would be less than significant.](#)

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Residual impacts would be less than significant for in-water work and no residual impacts would occur for work on land.

**Impact BIO-5: Landfill construction in the Northwest Slip would result in a permanent loss of marine habitat.**

Creation of the landfill in the Northwest Slip would occur in Phase II, after 2015. Placement of fill would cause a loss of aquatic habitat, including water surface, water column, soft bottom, and hard substrate. The beneficial uses associated with that habitat would also be lost. Because the landfill surface would be above the water surface and the shoreline slopes (see Figure 3.3-1), approximately 9.5 acres (3.9 ha) of habitat would be lost as measured at +4.8 MLLW. Under this water, 7.6 acres (3.1 ha) of soft bottom would be permanently lost (Table 3.3-3) due to fill placement and installation of a new containment dike across the southern opening of the Northwest Slip. At a biomass of 21 g/m<sup>2</sup> in soft bottom, an infaunal loss of about 0.7 metric ton would result. The 625 feet (191 m) of rocky dike constructed to contain the fill would provide 1.7 acres (0.7 ha) of new hard substrate in the water that would partially replace the 4.1-acre (1.7-ha) -loss of hard substrate in the water from the fill placement for a net loss of 2.5 acres (1.1 ha). The rocky dike lost due to the fill would result in a loss of approximately 9 metric tons of intertidal invertebrates and 35 metric tons of subtidal invertebrates, although 2.5 metric tons of the intertidal, and 15 metric tons of the subtidal, loss would be short term due to colonization of the new dike face.

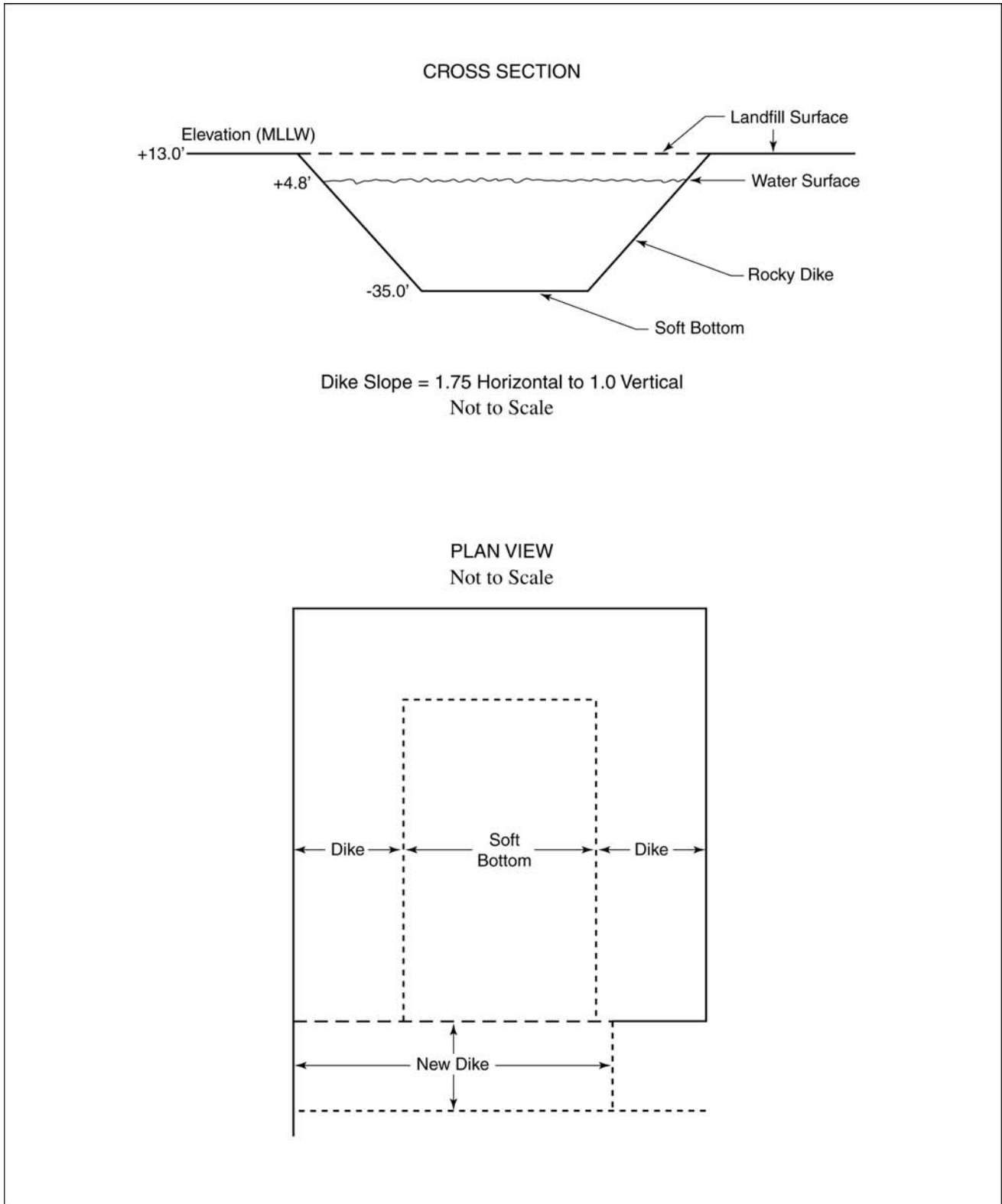
### **CEQA Impact Determination**

Construction of a 10-acre (4-ha) fill in the Northwest Slip would cause a permanent loss of 9.5 acres (3.1 ha) of aquatic habitat in the Los Angeles Inner Harbor as described above, and this impact is considered significant under CEQA.

### ***Mitigation Measures***

LAHD has developed, and continues to develop as needed, mitigation projects to provide mitigation credits for impacts of development in the Harbor to marine biological resources in coordination with NOAA Fisheries, USFWS, and CDFG through agreed-upon mitigation policies (USACE and LAHD 1992). These policies specify the values of existing habitats in the Harbor in a system of credits that are related to surface area, water depth, and location within the Harbor. Regarding depth, shallow water habitats are those less than –20 feet MLLW (water surface at +4.8 feet MLLW) with deep habitats being anything below that. The relative habitat value scale is: 0.5 for Inner Harbor habitats (shallow and deep), 1.0 for Outer Harbor deep habitats, and 1.5 for Outer Harbor shallow habitats. Mitigation credit values are assigned to mitigation project habitats equivalent to Outer Harbor deep habitats. Thus, each single mitigation credit would offset impacts to one acre of deep Outer Harbor habitat, two acres of Inner Harbor habitat, and 0.5 acre of Outer Harbor shallow habitat. The habitat credits from mitigation projects are banked for use in mitigating impacts of developments within the Harbor.

Mitigation credits from past habitat restoration projects that are available to offset impacts of the Berths 136-147 proposed Project and other projects in the Harbor are listed in Table 3.3-4. The Port has approximately 6 Inner Harbor credits in its mitigation banks and 155 credits in the Bolsa Chica and Outer Harbor banks. The latter banks would supply 310 Inner Harbor credits (212 + 98 in last column of Table 3.3-4). Table 3.3-5 shows the mitigation credits that have been committed for projects and those that would be required for upcoming projects, excluding the proposed Project, for a total of 72 credits. The Berths 136-147 proposed Project would require approximately 9.5 acres (3.9 ha) of mitigation in Inner Harbor credits or 4.75 acres (1.9 ha) in deep Outer Harbor credits. Tables 3.3-4 and 3.3-5 show that more than enough credits would be available to cover those needed for the proposed Project.



**Table 3.3-4. Mitigation Available for Proposed Berths 136-147 Project**

<i>Mitigation Bank</i>	<i>Approximate Credits Available</i>	<i>Value in Deep Outer Harbor<sup>1</sup></i>	<i>Value in Shallow Outer Harbor<sup>2</sup></i>	<i>Slips<sup>3</sup></i>
Bolsa Chica Bank	106	106	71	212
Outer Harbor Bank	49	49	33	98
Inner Harbor Bank <sup>4</sup>	6.2	n.a.	n.a.	6
TOTAL	161	155	103	316

*Notes:*

- 1.0 credit is equal to one acre of fill in deep Outer Harbor.
- 1.5 credits are equal to one acre of fill in shallow Outer Harbor.
- 0.5 credit is equal to one acre of fill in Inner Harbor.
- Inner Harbor Bank credits can only be used to mitigate Inner Harbor habitat loss.

**Table 3.3-5. Estimated Credits for Committed and Upcoming Port Projects**

<i>Projects</i>	<i>Credits</i>
<b>COMMITTED CREDITS<sup>1</sup></b>	
Berths 100-109 (China Shipping)	-21.5
Pier 300A	-71.5
Cabrillo SWH Expansion A	+27.0
Cabrillo Phase II	-1.2
Subtotal	-67.2
<b>UPCOMING PROJECTS<sup>2</sup></b>	
Berth 243-245 (Southwest Marine)	-4.0
NW Slip – 5-acre Fill	-2.5
Cabrillo SWH Expansion B	+22.5
Berth 121-131 (Yang Ming)	-14.0
Eelgrass Habitat Area	-13.5
Bridge to Breakwater	+4.4
Subtotal	-7.1
Total	--74.3

*Notes:*

- Estimated number of credits required, relative to deep Outer Harbor credits.
- Not including Berths 136-147 (proposed Project)

**BIO-1.** The LAHD shall apply 4.75 credits (= 9.5 Inner Harbor acres) available in the Bolsa Chica or Outer Harbor mitigation banks to compensate for loss of fish and wildlife habitat due to construction of fill in the Northwest Slip of the West Basin. Credit accounting and debiting of credits from either the Bolsa Chica or Outer Harbor mitigation banks shall occur prior to issuance of a Section 10/404 Permit by the USACE.



### *Residual Impacts*

This measure would completely mitigate the significant loss of Inner Harbor habitat for aquatic species by replacement through existing mitigation agreements/banks. Therefore, no residual impact would remain.

### **NEPA Impact Determination**

Construction of a 10-acre (4-ha) fill in the Northwest Slip would cause a permanent loss of 9.5 acres (3.1 ha) of aquatic habitat in the Los Angeles Inner Harbor, as described above, and this impact is considered significant under NEPA.

### *Mitigation Measures*

**Mitigation Measure BIO-1** would apply to this impact as described for CEQA.

### *Residual Impacts*

**Mitigation Measure BIO-1** would completely mitigate the significant loss of Inner Harbor habitat for aquatic species by replacement through existing mitigation agreements/banks. No residual impact would remain.

#### **3.3.4.3.1.2 Operational Impacts**

**Impact BIO-1b: Operations would not cause a loss of individuals or habitat for 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 new and upgraded terminal facilities in the West Basin would not adversely affect any of the state- or federally-listed, or special concern bird species listed in Table 3.3-1. Those species that currently use the West Basin area (see **Impact BIO-1a**) for foraging or resting could continue to do so because the proposed Project would not appreciably change the industrial activities in the West Basin or cause a loss of habitat for those species. Operation of the backland facilities (e.g., cranes, railyard, and container transfers) would not measurably change the numbers or species of common birds in that area and, thus, would not affect peregrine falcon foraging. Perching locations for birds such as the California brown pelican would still be present. The increase in vessel traffic of [up to](#) one vessel every 4 to 5 days would cause a short interval of disturbance throughout the route from Angels Gate to Berths 136-147 in the West Basin but would not result in a loss of habitat or individuals for sensitive birds that use the water surface for resting or foraging.

An estimated 88 additional vessel calls per year above the CEQA baseline of 246 (84 above the No Federal Action/NEPA Baseline of 250) to the Port would result from the proposed Project. Underwater sound from these vessels or tug boats used to maneuver them to the berth would add to the existing vessel traffic noise in the Harbor. Because a doubling in the number of vessels (noise sources) in the Harbor would be necessary to increase the overall underwater sound level by 3 dBA (FHWA 1978), the small increase in vessels relative to the total using the Harbor (2,800 per year in Los Angeles Harbor) would not result in a measurable change in overall

noise. Adding [up to](#) one vessel transit every 4 to 5 days would not adversely affect marine mammals in the Outer Harbor, Main Channel, and the West Basin because the transit distance would be short and infrequent, few individuals would be affected (large numbers are not present in the Harbor), sea lions would be expected to avoid sound levels that could cause damage to their hearing (as described in **Impact BIO-1a**), and overall underwater noise levels would not be measurably increased. Vessels approaching Angels Gate would pass through nearshore waters, and sound from their engines and drive systems could disturb marine mammals that happen to be nearby. However, few individuals would be affected because the animals are generally sparsely distributed (i.e., have densities of less than 5 individuals per 100 square km [Forney et al. 1995]), the animals would likely move away from the sound as it increases in intensity from the approaching vessel, and exposure would be of short duration. Noise levels associated with vessel traffic, including near heavily used ferry terminals, generally range between 130 and 136 dB (re 1  $\mu$ Pa) (WSDOT 2006), which are below the injury threshold of 180 dB<sub>rms</sub> (re 1  $\mu$ Pa).

No critical habitat for any of the listed species is present in the Harbor, so no critical habitat would be affected by operation of the proposed Project.

#### **CEQA Impact Determination**

Operational activities would result in no loss of individuals or habitat for rare, threatened, endangered, protected, or candidate species, or Species of Special Concern, and underwater sound from proposed Project-related vessels would affect few if any marine mammals for the reasons described above; impacts would, therefore, be less than significant under CEQA. No impacts to critical habitat would occur because no critical habitat is present.

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Residual impacts would be less than significant.

#### **NEPA Impact Determination**

Operational activities for in-water facilities and on the Northwest Slip fill would result in no loss of individuals or habitat for rare, threatened, endangered, protected, or candidate species, or Species of Special Concern, and underwater sound from proposed Project-related vessels would affect few if any marine mammals for the reasons described above; therefore, impacts would be less than significant under NEPA. Operation of facilities on the existing backlands is part of the No Federal Action/NEPA Baseline and thus would not result in impacts described for the CEQA analysis. No impacts would occur. No impacts to critical habitat would occur because no critical habitat is present.

#### *Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Residual impacts would be less than significant for operation of facilities in the water and on the Northwest Slip fill. No residual impacts would occur for operations on the existing backlands.

**Impact BIO-2b: Operations 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*

Operation of proposed Project facilities in the West Basin would have minimal effects on EFH. An increase in vessel traffic of 88 visits per year over the CEQA Baseline (246 vessels) and 84 over the No Federal Action/NEPA Baseline (250 vessels) due to the proposed Project would not increase overall noise as described in **Impact BIO-1b**. The added noise only occurs during vessel transit to and from the berth, so it is a short duration event. Thus, the proposed Project vessels would add to the number of noise events, but not to the overall underwater noise level. The addition of [up to](#) one vessel trip every 4 to 5 days would not adversely affect FMP species present in the Outer Harbor, Main Channel, or the West Basin because the proposed Project would add approximately 3 percent to the existing vessel traffic in the Port. In recent history, the Port has witnessed an improvement in fish abundance including EFH species (MEC [and Associates](#) 2002) even though there has been increased vessel traffic in the harbor. Therefore, additional ship calls would not adversely affect EFH species. Operation of proposed Project facilities on land, including the railyard and buffer area, would not affect EFH because none is present on land. Runoff from the new facilities would not substantially reduce or alter EFH in Harbor waters because water quality standards for protection of marine life would not be exceeded (see Section 3.13).

*Natural Habitat or Plant Community*

As described in **Impact BIO-2a**, no SEAs or natural plant communities are present that could be affected by operation of proposed Project facilities, including the relocated railyard, widened Harry Bridges Boulevard and the buffer area. No wetlands or ~~mudflats~~ [eelgrass beds](#) are present in the proposed Project area, and those in other areas of the Harbor are not located in or near (over one mile, 1.6 km, away from) the channels used for vessel movement within the Harbor. [No mudflats are present at the proposed Project site, and the small increase in vessel traffic would not affect the mudflats along the Main Channel.](#) Thus, these habitats would not be affected by operational activities in the West Basin or vessel transit through the Harbor to the West Basin.

**CEQA Impact Determination**

Operational activities on land and in the water would not substantially reduce or alter EFH for the reasons described above, resulting in less than significant impacts to EFH under CEQA. No SEAs, natural plant communities, wetlands, or ~~mudflats~~ [eelgrass beds](#) are present, [and the mudflats along the Main Channel would not be affected by project-related vessel traffic](#), resulting in no impacts under CEQA.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Residual impacts would be less than significant for EFH, and no residual impacts would occur for SEAs, natural plant communities, wetlands, [eelgrass beds](#), and mudflats.

**NEPA Impact Determination**

Operational activities in the water and on the Northwest Slip fill would not substantially reduce or alter EFH for the reasons described above, resulting in less than significant impacts to EFH under NEPA. Operational activities in the water would result in no impacts to SEAs, natural plant communities, wetlands, and ~~mudflats~~ [eelgrass beds](#) because none are present [and to mudflats along the Main Channel because project-related vessel traffic would not affect them](#). Operational activities on existing land are part of the No Federal Action/NEPA Baseline and thus would not result in the impacts described for the CEQA analysis. No impacts would occur.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Residual impacts would be less than significant for EFH, and no residual impacts would occur for SEAs, natural plant communities, wetlands, [eelgrass beds](#), and mud flats.

**3.3.4.3.2 Alternatives**

**3.3.4.3.2.1 Alternative 1 – No Project Alternative**

**Impact BIO-2b: Operations 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***

Operations activities under Alternative 1 would have minimal effects on EFH. An increase in vessel traffic of 4 visits over the CEQA Baseline (246 vessels) and none over the No Federal Action/NEPA Baseline (250 vessels) would add a small increment to the existing vessel traffic (approximately 2,800 in the Port in 2004) of less than 5 percent of that for the proposed Project and would not increase overall underwater noise as described in **Impact BIO-1b** for the proposed Project. The added noise only occurs during vessel transit to and from the berth, so it is a short duration event. Thus, the project vessels would add to the number of noise events, but not to the overall underwater noise level. The addition of one vessel trip every 91 days would not adversely affect

FMP species present in the Outer Harbor, Main Channel, or West Basin because Alternative 1 would add approximately 0.1 percent to the existing vessel traffic in the Port and no EFH would be lost. In recent history, the Port has witnessed an improvement in fish abundance including EFH species (MEC [and Associates 2002](#)) even though there has been increased vessel traffic in the harbor. Therefore, additional ship calls would not adversely affect EFH species. Operation of proposed Project facilities on land, including the railyard and buffer area, would not affect EFH because none is present on land. Runoff from the new facilities would not substantially reduce or alter EFH in Harbor waters because water quality standards for protection of marine life would not be exceeded (see Section 3.13).

### ***Natural Habitat or Plant Community***

As described in **Impact BIO-2a** for the proposed Project, no SEAs, natural plant communities, wetlands, or ~~mudflats-eelgrass beds~~ are present that could be affected by Alternative 1 operations. [No mudflats are present at the Alternative 1 site, and the small increase in vessel traffic through the Main Channel would not affect the mudflats at Berth 78.](#) Thus, these habitats would not be affected by operational activities in the West Basin or vessel transit through the Harbor to the West Basin.

### **CEQA Impact Determination**

Operational activities would not substantially reduce or alter EFH, resulting in less than significant impacts under CEQA. No SEAs, natural plant communities, wetlands, or ~~mudflats-eelgrass beds~~ are present, [and the mudflats along the Main Channel would not be affected by project-related vessel traffic.](#) resulting in no impacts under CEQA.

### ***Mitigation Measures***

No mitigation is required.

### ***Residual Impacts***

Residual impacts to EFH would be less than significant and no residual impacts to SEAs, natural plant communities, wetlands, or mudflats would occur.

### **NEPA Impact Determination**

Under this alternative, no development would occur within the in-water proposed Project area (i.e., no dredging, filling of the Northwest Slip or new wharf construction). Therefore, potential impacts under NEPA are not applicable since there would be no federal action under this alternative.

### ***Mitigation Measures***

Due to No Federal Action, mitigation is not applicable. No mitigation measures are necessary under NEPA.

### ***Residual Impacts***

With no mitigation required, there would be no residual impacts under NEPA.

#### 3.3.4.3.2.2 Alternative 2 – Reduced Project: Proposed Project Without 10-Acre Fill

**Impact BIO-1a: Construction activities would not cause a loss of individuals or 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.**

Dredging (minus dredging for the Northwest Slip fill dike), backland improvements, and wharf construction/reconstruction activities would be the same as for the proposed Project and would be unlikely to affect listed, candidate, or special concern species through temporary increases in noise, vibration, and turbidity as well as the potential for displacement of individuals from the work area as described in **Impact BIO-1a** for the proposed Project. No critical habitat for any federally-listed species is present in the Alternative 2 area. Disturbances associated with the Northwest Slip fill would not occur, and no potential foraging area for the California least tern, California brown pelican, or any other special status species in Table 3.3-1 would be affected there. Foraging by any of these species in the Alternative 2 area could continue during construction with no adverse effects to the species. Individuals using the West Basin could use other areas within the Harbor if construction activities caused them to avoid the work area. No individuals would be lost and their populations would not be adversely affected by construction activities. [Disposal of dredged material at the ocean disposal sites \(LA-2 or LA-3\) would not adversely affect California brown pelicans, marine mammals, or sea turtles because few if any are likely to be present during project-related disposal activity, and any that are present would avoid the disturbance \(USEPA 1987, 2005\).](#)

Sound pressure waves in the water caused by pile driving would have the same potential to affect the hearing of marine mammals (sea lions) swimming in the West Basin as described for the proposed Project.

Transport of rock for the wharf work at Berths 144-147 would be the same as for the proposed Project. However, no rock would need to be transported (2 barges per day for 23.5 days) for the Northwest Slip fill dike. Thus, the potential for effects on marine mammals would be approximately one-third less than for the proposed Project.

The USACE has made a no effect determination for federally-listed species in accordance with requirements of Section 7 of the ESA. [Because there would be no 10-acre fill in the Northwest Slip in 2015 or later, the Port would not have a qualified biologist survey the area in the future for presence/use by federally listed species.](#)

#### **CEQA Impact Determination**

As described above, construction activities on land and in the water, [including ocean disposal of dredged material](#), 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 marine mammals; impacts would, therefore, be less than significant under CEQA. No critical habitat for federally listed species is present, and no impacts would occur.



### *Mitigation Measures*

No mitigation is required.

### *Residual Impacts*

Residual impacts would be less than significant.

### **NEPA Impact Determination**

As described above, in-water ~~and the Northwest Slip fill~~ construction activities [\(including ocean disposal of dredged material\)](#) 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 marine mammals; therefore, impacts would be less than significant under NEPA. Backland construction activities on the existing backlands are part of the No Federal Action/NEPA Baseline and thus would not result in impacts described for the CEQA analysis. No impacts would occur.

### *Mitigation Measures*

No mitigation is required.

### *Residual Impacts*

Residual 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 loss of EFH due to fill of Northwest Slip in the proposed Project would not occur in this alternative. Alternative 2 would have no effect on the FMP species that do not occur in the West Basin, and minimal effects on those that are rare or uncommon, such as Pacific mackerel and English sole (MEC and Associates 2002), because few if any individuals would be in the disturbance area. Effects of dredging, pile removal, and wharf construction/upgrades at Berths 136-147 on FMP species would be the same as described for the proposed Project. No permanent loss of habitat would occur from the wharf work, [although soft bottom habitat would be converted to rocky habitat at Berth 147](#), and few if any individual fish would be lost because individuals would avoid the work area, resulting in no loss of sustainable fisheries.

Construction activities on land from Alternative 2 (including Harry Bridges Boulevard widening and buffer area, and railyard relocation) would have no direct effects on EFH, which is [entirely](#) located in the water. Runoff of sediments and contaminants from such construction, however, could enter Harbor waters. As discussed in Section 3.13, implementation of sediment control measures (e.g., sediment barriers and sedimentation basins) and BMPs, would minimize the impacts of such runoff.

[Disposal of dredged material at the ocean disposal sites would have the same impacts as described for the proposed Project and would not adversely affect EFH.](#)

### ***Natural Habitat or Plant Community***

No kelp or eelgrass beds are present in the Alternative 2 area, and those in other parts of the Harbor would not be affected by construction activities in the Berths 136-147 area due to their distance from the work area. No designated SEAs, including the least tern nesting site on Pier 400, would be affected by this alternative because no construction would take place at or near this SEA. As described for the proposed Project, no wetlands or mudflats are present in the Alternative 2 area, and those in other areas of the Harbor would not be affected by construction activities in the West Basin due to distance from the Alternative 2 site (more than ~~three-two~~ miles, [4.83.2](#) km).

### **CEQA Impact Determination**

No loss of EFH would occur, compared to the 9.5-acre (3.9-ha) loss in the proposed Project, because the Northwest Slip would not be filled. Dredging, pile removal, and wharf construction activities, [as well as ocean disposal of dredged material](#), would cause temporary disturbances to habitat for FMP species that would be less than significant as described for the proposed Project. Construction activities in the existing backlands, including the railyard relocation, and road improvements (Harry Bridges Boulevard widening and buffer area) would be the same as for the proposed Project and would have no direct impacts on EFH or other natural habitats because none are present. Indirect impacts through runoff of sediments or contaminants during storm events would be less than significant because such runoff would be controlled as described for water quality in Section 3.13 (e.g., project-specific SWPPP with BMPs such as sediment barriers and sedimentation basins). No impacts to kelp beds, eelgrass beds, wetlands, or mudflats would occur because none of these habitats are present at or near the Alternative 2 site.

### ***Mitigation Measures***

No mitigation is required.

### ***Residual Impacts***

Residual impacts to EFH would be less than significant. No residual impacts to natural habitats, special aquatic sites, or plant communities would occur.

### **NEPA Impact Determination**

No loss of EFH would occur because the Northwest Slip would not be filled. Dredging, pile removal, ~~and~~-wharf construction activities, [and ocean disposal of dredged material](#) would cause temporary disturbances to habitat for FMP species that would be less than significant as described for the proposed Project. No impacts to kelp beds, eelgrass beds, wetlands, or mudflats would occur as a result of in-water construction because none of these habitats are present at or near the Alternative 2 site. Construction activities in the backlands and for road improvements are part of

the No Federal Action/NEPA Baseline and thus would not result in impacts described for the CEQA analysis. No impacts would occur.

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Residual impacts to EFH would be less than significant. No residual impacts to natural habitats, special aquatic sites, or plant communities would occur.

#### **Impact BIO-4a: Dredging and wharf construction activities would not substantially disrupt local biological communities.**

#### *Dredging*

For Alternative 2, dredging for the proposed wharf upgrade and new wharf at Berths 146-147 would temporarily deepen approximately 3.6 acres (1.5 ha) of soft bottom habitat and permanently remove 1.1 acres (0.5 ha) in Phase I (Table 3.3-3), the same as described for the proposed Project. [This dredging would also result in a slight increase in water column habitat.](#) At Berths 136-139, Phase I dredging would affect about 2.3 acres (0.9 ha), as for the proposed Project. Temporary effects to the West Basin benthic community from localized turbidity and sediment deposition generated by dredging along Berths 146-147 and 136-139 would be the same as for the proposed Project. Effects of turbidity and resuspension of sediments containing contaminants on planktonic organisms would be limited to the immediate vicinity of the dredging and would be the same as for the proposed Project.

Removal of sediments containing accumulated contaminants through dredging for the wharf work at Berths 145-147 would provide the same benefit to the benthic community in the West Basin and the Harbor as the proposed Project. Temporary disturbances to fish and marine mammals caused by dredging and wharf construction/reconstruction activities for Alternative 2 would be the same as for the proposed Project.

Fish in the water column and on or near the bottom would be temporarily disturbed by the dredging and wharf construction activities as a result of turbidity, noise, displacement, and vibration as described for the proposed Project. Effects on fish populations in the Inner Harbor would be short term and localized with no substantial disruption of local fish communities. Marine mammals, such as sea lions, in the West Basin at the time of construction could be temporarily disturbed by construction activities, but any individuals present would likely avoid the work area. Few, if any, would be present based on survey data from 2000 (MEC and Associates 2002). Construction activities would not interfere with marine mammal foraging because the disturbances would be in localized areas and large foraging areas would remain available to them elsewhere in the West Basin and throughout the Harbor.

[Effects of dredge material disposal at the LA-2 or LA-3 ocean disposal sites would be the same as described for the proposed Project.](#)

#### *Northwest Slip Fill*

Effects of disturbances and turbidity from filling the Northwest Slip and keying the dike for that fill would not occur under this alternative.

#### *Wharf and Backland Construction*

For Alternative 2, as for the proposed Project, construction of a new 705-foot (215-m) wharf at Berth 147 would add approximately 1.5 acres (0.6 ha) of new rocky dike hard substrate habitat, while upgrades at Berths 145-146 would add about 0.3 acres (0.1 ha) of vertical sheet pile habitat. Approximately 0.6 acres (0.2 ha) of rocky dike would be removed and replaced, for a temporary impact. Demolition and reconstruction of the wharf at Berths 146-147 would result in a net increase of about 0.3 acres (0.1 ha) of water surface under the wharf. At Berths 136-139, about 0.6 acres (0.2 ha) of vertical sheet pile habitat would be added prior to dredging between the pierhead line and the Federal channel. The new pilings, installed to support these wharves and the sheet pile at Berths 136-139 and 145-146, would add hard substrate habitat in the West Basin, [replacing the small amount of riprap habitat lost within the pile footprints. A small amount of water column habitat would be converted to hard substrate habitat the same as for the proposed Project.](#) Removal of 770 timber pilings at Berth 147 and 360 concrete pilings from partial demolition of the wharf at Berth 146 would reduce the amount and type of piling habitat in the water column. Overall, the total amount of hard substrate present would remain about the same, and local West Basin biological communities would not be substantially disrupted.

Also for Alternative 2, as described for the proposed Project, construction on previously developed areas could affect biological communities through: (1) noise and vibration, and (2) runoff of pollutants. Turbidity, noise, and vibration (primarily from pile driving) would likely cause most fish and birds to temporarily avoid the immediate construction area. Fish and bird populations would not be adversely affected because the small number of individuals moving into other areas of the West Basin, the short duration of the disturbance, and the small area affected would not substantially disrupt West Basin biological communities. Backland and road improvement activities, including the railyard relocation and Harry Bridges Boulevard widening and buffer area, would have minimal effect on terrestrial biota because the species present are non-native 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, biological communities in this industrial area would not be substantially disrupted.

Runoff of pollutants from Alternative 2 backland construction activities would be minimized through use of BMPs (see Section 3.13), and the low concentrations that could enter Harbor waters would not adversely affect marine organisms.

#### *Accidents*

Accidents on land could result in runoff of pollutants, but levels that could adversely affect aquatic biota near the point of discharge to the Harbor are unlikely due to containment, rapid cleanup, and implementation of runoff control measures as described in **Impact WQ-1d**.

Accidental spills of fuel, lubricants, or hydraulic fluid from the equipment used during dredging and disposal of the material are unlikely to occur during Alternative

2 construction (see Section 3.13 **Impact WQ-1d**) and would not adversely affect aquatic biota to the degree that West Basin biological communities are substantially disrupted. Any such spills would be small and cleaned up immediately, resulting in loss of few marine organisms and causing no adverse community effects. A larger spill that could have locally substantial effects on biological resources is not expected to occur, even under reasonable worst-case conditions (see Section 3.7, Hazards). Accidental spills of pollutants during construction on land would be small because large quantities of such substances would not be used during construction. These spills would be contained and cleaned up with no runoff to Harbor waters (see Section 3.13).

### **CEQA Impact Determination**

Construction activities in waters of the West Basin and on 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 pollutants from backland construction activities would not substantially disrupt biological communities in the West 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 Alternative 2 (e.g., project-specific SWPPP and BMPs such as sediment barriers and sedimentation basins – see Section 3.13.4.3 for a list of measures). Accidental spills from equipment during dredging would not substantially disrupt local biological communities because they would be small, contained, cleaned up immediately, and affect only a few common marine organisms, and thus would have localized, less than significant impacts. Accidental spills during construction on land would not reach Harbor waters due to the implementation of BMPs, and thus would have no impacts on marine communities. No notice to proceed will be issued without approval of the specific SWPPP and BMPs. [Disposal of dredged material at the USEPA-approved LA-2 or LA-3 ocean disposal sites would not substantially disrupt biological communities at those offshore sites, and impacts would be less than significant.](#)

### *Mitigation Measures*

No mitigation is required.

### *Residual Impacts*

Residual impacts would be less than significant.

### **NEPA Impact Determination**

Construction activities from Alternative 2 in the waters of the West Basin would result in no substantial disruption of biological communities, and impacts, therefore, would be less than significant under NEPA. Backland construction activities would be part of the No Federal Action/NEPA Baseline and thus would not result in any impacts. [Disposal of dredged material at the USEPA-approved LA-2 or LA-3 ocean disposal sites would not substantially disrupt biological communities at those offshore sites, and impacts would be less than significant.](#)

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Residual impacts would be less than significant for in-water work, and no residual impacts would occur for work on land.

**Impact BIO-5: No permanent loss of marine habitat would occur.**

No permanent loss of marine habitat and its beneficial uses would occur in Alternative 2 because the Southwest Slip fill and 400-foot (122-m) Berth 136 wharf extension would not be built. Compared to the proposed Project, the impacts avoided include [a permanent](#) loss of 9.5 acres (3.9 ha) of surface water, 7.6 acres (3.1 ha) of soft bottom habitat, and 2.5 acres (1.1 ha) of rocky dike habitat that support approximately 0.7 metric tons of benthic infaunal organisms, and 26.5 metric tons of hard substrate epifaunal invertebrates.

**CEQA Impact Determination**

No impacts would occur because no marine habitat would be lost.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

No residual impacts would occur.

**NEPA Impact Determination**

No impacts would occur because no marine habitat would be lost.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

No residual impacts would occur.

**Impact BIO-1b: Operations would not cause a loss of individuals or habitat for 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.**

As for the proposed Project, operation of new and upgraded terminal facilities in the West Basin under Alternative 2 would not adversely affect any of the state- or federally-listed, or special concern bird species listed in Table 3.3-1. Those species



that currently use the West Basin area for foraging or resting could continue to do so because Alternative 2 would not appreciably change the industrial activities in the West Basin or cause a loss of habitat for those species. Operation of the backland facilities (e.g., cranes, railyard, and container transfers), would not measurably change the numbers or species of common birds in that area and, thus, would not affect peregrine falcon foraging. Perching locations for birds such as the California brown pelican would still be available. The increase in vessel traffic of up to one vessel every 4 to 5 days would cause a short interval of disturbance throughout the route from Angels Gate to Berths 136-147 in the West Basin, but would not result in a loss of habitat or individuals for sensitive birds that use the water surface for resting or foraging.

Increases in vessel traffic would be the same as under the proposed Project, an estimated 88 additional vessel calls above the CEQA baseline (84 above the No Federal Action/NEPA Baseline), and underwater sound would not be increased as described in **Impact BIO-1b** for the proposed Project. Adding up to one vessel transit every 4 to 5 days would not adversely affect marine mammals in the Outer Harbor, Main Channel, and the West Basin because the transit distance would be short and trips infrequent, few individuals would be affected (large numbers are not present in the Harbor), and sea lions would be expected to avoid sound levels that could cause damage to their hearing, and overall underwater noise levels would not be measurably increased. Vessels approaching Angels Gate would pass through nearshore waters, and sound from their engines and drive systems could disturb marine mammals that happen to be nearby. Few individuals would be affected (animals are generally sparsely distributed), the animals would likely move away from the sound as it increases in intensity from the approaching vessel, and exposure would be of short duration. Noise levels associated with vessel traffic, including near heavily used ferry terminals, generally range between 130 and 136 dB (re 1 µPa) (WSDOT 2006), which are below the injury threshold of 180 dB<sub>rms</sub> (re 1 µPa).

No critical habitat for any listed species is present in the Harbor, so no critical habitat would be affected by operations of Alternative 2.

#### **CEQA Impact Determination**

Operational activities would result in no loss of individuals or habitat for rare, threatened, endangered, protected, or candidate species, or Species of Special Concern, and underwater sound from Alternative 2 project-related vessels would affect few if any marine mammals. Impacts would, therefore, be less than significant under CEQA. No impact to critical habitat would occur because no critical habitat is present.

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Residual impacts would be less than significant.

### **NEPA Impact Determination**

Operational activities for in-water facilities would result in no loss of individuals or habitat for rare, threatened, endangered, protected, or candidate species, or Species of Special Concern, and underwater sound from project-related vessels during Alternative 2 operations would affect few if any marine mammals. Therefore, impacts would be less than significant under NEPA. Operation of facilities on the existing backlands is part of the No Federal Action/NEPA Baseline, and no impacts would occur. No impact to critical habitat would occur because no critical habitat is present.

### *Mitigation Measures*

No mitigation is required.

### *Residual Impacts*

Residual impacts would be less than significant for operation of in-water facilities, and no residual impacts would occur for backland operations.

**Impact BIO-2b: Operations 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*

Operation of Alternative 2 facilities would have minimal effects on EFH. An increase in vessel traffic of 88 visits per year over the CEQA Baseline (246 vessels) and 84 over the No Federal Action/NEPA Baseline (250 vessels) would occur, as for the proposed Project, and would not increase the overall underwater sound levels as described in **Impact BIO-1b** for the proposed Project. Additional vessels would add to the number of noise events, but not to the overall underwater noise level. The addition of [up to](#) one vessel trip every 4 to 5 days would not adversely affect FMP species present in the Outer Harbor, Main Channel, or the West Basin because Alternative 2 would add approximately 3 percent to the existing vessel traffic in the Port. These fish species are adapted to the existing noise in the Harbor, and adding a small number of noise events like those already occurring would not adversely affect them. Operation of Alternative 2 facilities on land, including the railyard and buffer area, would not affect EFH because none are present on land. In recent history, the Port has witnessed an improvement in fish abundance including EFH species (MEC [and Associates](#) 2002) even though there has been increased vessel traffic in the harbor. Therefore, additional ship calls would not adversely affect EFH species. Operation of proposed Project facilities on land, including the railyard and buffer area, would not affect EFH because none is present on land. Runoff from the new facilities would not substantially reduce or alter EFH in Harbor waters because water quality standards for protection of marine life would not be exceeded (see Section 3.13).

### *Natural Habitat or Plant Community*

As described in **Impact BIO-2a**, no natural plant communities, SEAs, wetlands, or ~~mudflats~~ [eelgrass beds](#) are present that could be affected by operation of the

Alternative 2 facilities, including the relocated railyard, widened Harry Bridges Boulevard, and the [Harry Bridges Buffer Area](#). Wetlands or ~~mudflats-eelgrass beds~~ in other areas of the Harbor are not located in or near (over one mile, 0.6 km, away from) the channels used for vessel movement within the Harbor. [No mudflats are present at the Alternative 2 site, and the small increase in vessel traffic would not affect the mudflats along the Main Channel.](#) Thus, these habitats would not be affected by operational activities in the West Basin or vessel transit through the Harbor to the West Basin.

#### **CEQA Impact Determination**

Operational activities on land and in the water would not substantially reduce or alter EFH, resulting in less than significant impacts under CEQA. No SEAs, natural plant communities, wetlands, [eelgrass beds](#), or mudflats ~~are present~~[would be affected](#), resulting in no impacts under CEQA

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Residual impacts to EFH would be less than significant, and no residual impacts to natural plant communities, wetlands, [eelgrass beds](#), or mudflats would occur.

#### **NEPA Impact Determination**

Alternative 2 operational activities in the water would not substantially reduce or alter EFH, resulting in less than significant impacts under NEPA. No SEAs, natural plant communities, wetlands, [eelgrass beds](#), or mudflats ~~are present~~[would be affected](#), resulting in no impacts under NEPA. Operational activities on the backlands are part of the No Federal Action/NEPA Baseline and thus would not result in impacts described for the CEQA analysis. No impacts would occur.

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Residual impacts to EFH would be less than significant, and no residual impacts to natural plant communities, wetlands, [eelgrass beds](#), or mudflats would occur.

### **3.3.4.3.2.3 Alternative 3 – Reduced Wharf**

**Impact BIO-1a: Construction activities would not cause a loss of individuals or 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.**

Alternative 3 wharf-related construction disturbances could affect the special status bird species in Table 3.3-1 that use marine waters in the same manner but over a smaller area and for a shorter duration than for the proposed Project due to the smaller amount of wharf work and no landfill construction. Backland construction activities, including the railyard relocation and Harry Bridges Boulevard widening and buffer area, would have the same effects on the peregrine falcon as described for the proposed Project in **Impact BIO-1a**. No critical habitat is present for any federally-listed species. Foraging by any of the bird species in Table 3.3-1 in the Alternative 3 area would continue during construction with no adverse effects to the species, and individuals using the West Basin could use other areas within the Harbor if construction activities caused them to avoid the work area. No individuals would be lost, and their populations would not be adversely affected by construction activities. Pile driving at Berths 145-146 that could affect marine mammal hearing would be reduced from about 275 to 105 piles, thereby reducing the exposure of marine mammals to sound pressure waves in the water. No rock would be imported from Catalina Island because no new dikes would be constructed. This would avoid the potential for effects on marine mammals described for the proposed Project. [Disposal of dredged material at the ocean disposal sites \(LA-2 or LA-3\) would not adversely affect California brown pelicans, marine mammals, or sea turtles because few if any are likely to be present during project-related disposal activity, and any that are present would avoid the disturbance.](#)

The USACE has made a no effect determination for federally-listed species in accordance with requirements of Section 7 of the ESA. [Because there would be no 10-acre fill in the Northwest Slip in 2015 or later, the Port would not have a qualified biologist survey the area in the future for presence/use by federally listed species.](#)

#### **CEQA Impact Determination**

As described above, construction activities for Alternative 3 on land and in the water, [including ocean disposal of dredged material](#), 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 marine mammals. Impacts would, therefore, be less than significant under CEQA. No critical habitat for federally-listed species is present, and no impacts would occur.

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Residual impacts would be less than significant.

#### **NEPA Impact Determination**

As described above, in-water construction activities [\(including ocean disposal of dredged material\)](#) 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 marine mammals. Therefore, impacts would be less than significant under NEPA.

Backland construction activities are part of the No Federal Action/NEPA Baseline and thus would not result in impacts described for the CEQA analysis. No impacts would occur.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Residual impacts would be less than significant impacts for in-water work, and no residual impacts would occur for backland construction.

**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 loss of EFH due to fill of the Northwest Slip would not occur in Alternative 3. Alternative 3 would have no effect on the FMP species that do not occur in the West Basin, and minimal effects on those that are rare or uncommon, such as Pacific mackerel and English sole (MEC and Associates 2002), because few if any individuals would be in the disturbance area. Effects of dredging and wharf upgrades at Berths 136-147 on FMP species would be of the same type but for a shorter duration than that described for the proposed Project in **Impact BIO-2a** because less wharf work would occur. Dredging between the federal channel and the pierhead line would take approximately 10 days at Berths 136-139 and another 10 days at Berths 144-146. No permanent loss of habitat would occur from the wharf work, and few if any individual fish would be lost because individuals would avoid the work area, resulting in no loss of sustainable fisheries. In recent history, the Port has witnessed an improvement in fish abundance including EFH species (MEC [and Associates](#) 2002) even though there has been increased vessel traffic in the harbor. Therefore, additional ship calls would not adversely affect EFH species. Operation of proposed Project facilities on land, including the railyard and Harry Bridges Buffer Area, would not affect EFH because none is present on land. Runoff from the new facilities would not substantially reduce or alter EFH in Harbor waters because water quality standards for protection of marine life would not be exceeded (see Section 3.13).

[Disposal of dredged material at the ocean disposal sites would be the same as described for the proposed Project and would not adversely affect EFH.](#)

Construction activities on land (including the Harry Bridges Boulevard widening, buffer area, and railyard relocation) would have no direct effects on EFH, which is [entirely](#) located in the water. Runoff of sediments from such construction, however, could enter Harbor waters. As discussed in Section 3.13, implementation of sediment control measures (e.g., barriers and catch basins) would minimize such runoff.

### ***Natural Habitat or Plant Community***

No kelp or eelgrass beds are present in the Alternative 3 Project area, and those in other parts of the Harbor would not be affected by construction activities in the Berths 136-147 area due to their distance from the Alternative 3 site. No designated SEAs, including the least tern nesting site on Pier 400, would be affected by this alternative because no construction activities would take place at or near that SEA. No wetlands or mudflats are present in the Alternative 3 [construction](#) area as described for the proposed Project (**Impact BIO-2b**), and the closest [eelgrass beds and salt marsh](#) habitats are more than three miles (4.8 km) away, [and the closest mudflats are located nearly two miles \(3.2 km\) away in the Main Channel](#).

### **CEQA Impact Determination**

No loss of EFH would occur because the Northwest Slip would not be filled. Dredging and wharf upgrade activities, [as well as ocean disposal of dredged material](#), would cause temporary disturbances, but no substantial alteration, to habitat for FMP species that would be less than significant for the reasons described above. Alternative 3 construction activities in the backlands, including the railyard relocation and road improvements (Harry Bridges Boulevard widening and buffer area), 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 3.13 (e.g., project-specific SWPPP and BMPs such as sediment barriers and sedimentation basins). No impacts to SEAs, kelp beds, eelgrass beds, wetlands, or mudflats would occur because none of these habitats are present at or near the Alternative 3 site.

### ***Mitigation Measures***

No mitigation is required.

### ***Residual Impacts***

Residual impacts would be less than significant for EFH. No residual impacts would occur for natural habitats, special aquatic sites, or plant communities.

### **NEPA Impact Determination**

No loss of EFH would occur because the Northwest Slip would not be filled. Dredging, ~~and~~ wharf upgrade activities, [and ocean disposal of dredged material](#) during Alternative 3 construction would cause temporary disturbances to habitat for FMP species that would be less than significant for the reasons described above. Construction activities in the backlands and for road improvements are part of the No Federal Action/NEPA Baseline and thus would not result in impacts described for the CEQA analysis. No impacts would occur.

### ***Mitigation Measures***

No mitigation is required.



### *Residual Impacts*

Residual impacts would be less than significant for EFH. No residual impacts would occur for natural habitats, special aquatic sites, or plant communities.

#### **Impact BIO-4a: Construction activities would not substantially disrupt local biological communities.**

Compared to the proposed Project, Alternative 3 wharf upgrades at Berths 145-146 would result in temporary impacts to soft bottom habitat of 1.6 acres (0.7 ha), a reduction of 2.0 acres (0.8 ha), and no disturbance to hard bottom, a reduction of 0.6 acres (0.3 ha) from the proposed Project. No water surface would be lost, no soft bottom would be permanently lost, and 0.3 acres (0.1 ha) of sheet pile habitat would be gained. Soft bottom temporary disturbances resulting from wharf work would affect approximately 0.1 metric tons of invertebrates, a reduction of about 0.2 metric tons compared to the proposed Project. The area affected at Berths 136-139 would be the same as for the proposed Project (see Table 3.3-3). [Dredging at Berths 145-146 and 136-139 would result in a slight increase in water column habitat.](#) Overall disturbances to benthic organisms, planktonic organisms, fish, and marine mammals would be of the same type as for the proposed Project, but of lower magnitude due to the smaller area disturbed during wharf work. Biological communities in the West Basin would not be substantially disrupted by construction activities because the area of disturbance would represent only a small proportion of the marine habitats in the West Basin, benthic organisms would begin recolonization of the disturbed areas immediately, effects on plankton and fish would not be measurable, and the few marine mammals that could be present would avoid the disturbance. The potential for accidental spills of fuel, lubricants, or hydraulic fluid from equipment would be less than for the proposed Project because the duration of equipment working in or over the water would be less.

[Effects of dredge material disposal at the LA-2 or LA-3 ocean disposal sites would be the same as described for the proposed Project.](#)

Effects of construction on the existing backlands, including runoff of pollutants, would be the same for Alternative 3, as described for the proposed Project in **Impact BIO-4a**.

#### **CEQA Impact Determination**

Construction activities in waters of the West Basin and on 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 pollutants from backland construction activities would not substantially disrupt biological communities in the West 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 Alternative 3 (e.g., project-specific SWPPP and BMPs such as sediment barriers and sedimentation basins – see Section 3.13.4.3 for a list of measures). Accidental spills from equipment during dredging would not substantially disrupt local biological communities because they would be small, contained, cleaned up immediately, and affect only a few common marine organisms, and thus would have localized, less than significant impacts. Accidental spills during construction on land would not reach Harbor waters due to the implementation of BMPs, and thus would have no impacts on marine communities. No notice to proceed will be issued without



approval of the specific SWPPP and BMPs. [Disposal of dredged material at the USEPA-approved LA-2 or LA-3 ocean disposal sites would not substantially disrupt biological communities at those offshore sites, and impacts would be less than significant.](#)

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Residual impacts would be less than significant.

**NEPA Impact Determination**

Construction activities in waters of the West Basin from Alternative 3 would result in no substantial disruption of local biological communities, and impacts would, therefore, be less than significant under NEPA. Backland construction activities are part of the No Federal Action/NEPA Baseline and thus would not result in impacts described for the CEQA analysis. No impacts would occur. Accidental spills from equipment during dredging would not substantially disrupt West Basin biological communities, resulting in less than significant impacts under NEPA because pollutant plumes from these spills are expected to be small in volume, exposure of marine biological resources would be short and isolated, and few individuals of common species that are abundant in the Harbor would be affected. [Disposal of dredged material at the USEPA-approved LA-2 or LA-3 ocean disposal sites would not substantially disrupt biological communities at those offshore sites, and impacts would be less than significant.](#)

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Residual impacts would be less than significant for in-water work. No residual impacts would occur for backland construction.

**Impact BIO-2b: Operations 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***

Operation of Alternative 3 facilities in the West Basin would have minimal effects on EFH. An increase in vessel traffic of 54 visits per year over the CEQA Baseline (246 vessels) and 50 over the No Federal Action/NEPA Baseline (250 vessels) would be 34 trips less than for the proposed Project and would not add to the overall underwater noise in the Harbor for the same reasons described for the proposed Project in **Impact BIO-2b**. The added noise only occurs during vessel transit to and from the berth and is a short duration event. The addition of [up to](#) one vessel trip every 6 to 7 days would not adversely affect FMP species present in the Outer

Harbor, Main Channel, or the West Basin because Alternative 3 would add approximately 2 percent to the existing vessel traffic in the Port. These fish species are adapted to the existing noise in the Harbor, and adding occasional additional noise events like those already occurring would not adversely affect them. In recent history, the Port has witnessed an improvement in fish abundance including EFH species (MEC [and Associates 2002](#)) even though there has been increased vessel traffic in the harbor. Therefore, additional ship calls would not adversely affect EFH species. Operation of proposed Project facilities on land, including the railyard and buffer area, would not affect EFH because none is present on land. Runoff from the new facilities would not substantially reduce or alter EFH in Harbor waters because water quality standards for protection of marine life would not be exceeded (see Section 3.13).

### ***Natural Habitat or Plant Community***

As described in **Impact BIO-2a** for the proposed Project, no natural plant communities, SEAs, wetlands, [eelgrass beds](#), or mudflats are present that could be affected by operation of [facilities at the Alternative 3 facilities site](#), including the relocated railyard, widened Harry Bridges Boulevard, and the Harry Bridges Buffer Area. The closest wetlands [and eelgrass beds to the shipping channel used for vessel movement through the Harbor to the West Basin](#) are over one mile (0.6 km) from the ship channel in the Outer Harbor. Thus, these habitats would not be affected by operations activities in the West Basin or by vessel transit through the Harbor to the West Basin. [Mudflats are located along the Main Channel, and the small project-related increase in vessel traffic would not affect this habitat.](#)

### **CEQA Impact Determination**

Alternative 3 operational activities on land and in the water would not substantially reduce or alter EFH, resulting in less than significant impacts to EFH under CEQA. No impacts to natural plant communities, SEAs, wetlands, or ~~mudflats~~ [eelgrass beds](#) would occur under CEQA because none of these habitats are present. [Mudflats along the Main Channel would not be affected by project-related vessel traffic resulting in no impacts under CEQA.](#)

### ***Mitigation Measures***

No mitigation is required.

### ***Residual Impacts***

Residual impacts would be less than significant for EFH, and no residual impacts would occur for SEAs, natural plant communities, wetlands, [eelgrass beds](#), or mudflats.

### **NEPA Impact Determination**

Operational activities in the water would not substantially reduce or alter EFH, resulting in less than significant impacts under NEPA. Operational activities in the water would result in no impacts to natural plant communities, SEAs, wetlands, or ~~mud flats~~ [eelgrass beds](#) because none are present [and to mudflats along the Main Channel because project-related vessel traffic would not affect them.](#) Operational

activities on land are part of the No Federal Action/NEPA Baseline and thus would not result in impacts described for the CEQA analysis. No impacts would occur.

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Residual impacts would be less than significant for EFH, and no residual impacts would occur for SEAs, natural plant communities, wetlands, [eelgrass beds](#), and mudflats.

#### **3.3.4.3.2.4 Alternative 4 – Omni Terminal**

**Impact BIO-1a: Construction activities would not cause a loss of individuals or 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.**

Alternative 4 construction activities would be limited to work on the existing backlands. These land areas provide no breeding or foraging habitat for any of the bird species in Table 3.3-1, except for the peregrine falcon that could hunt for prey (birds such as rock doves) over the area. This species forages throughout the Harbor area as described for the proposed Project in **Impact BIO-1b**. No prey would be lost due to Alternative 4 construction activities, only a small amount of foraging area would be temporarily affected, and the falcons could use areas away from the Alternative 4 backlands site during construction. No known peregrine falcon nesting areas (Vincent Thomas and Schuyler F. Heim bridges) would be affected due to distance from the Alternative 4 activities. The Vincent Thomas Bridge is over 0.5 mile (0.8 km) from Berth 147 and over 1.2 miles (1.9 km) from Northwest Slip, and the Schuyler R. Heim Bridge is over two miles (3.2 km) from the West Basin. Several of the species (e.g., double-crested cormorant, California gull, and California brown pelican) may use on-shore structures for resting at times, as described in **Impact BIO-1a** for the proposed Project, but other resting areas are available in the West Basin and throughout the Harbor. Thus, none of these species would be adversely affected by Alternative 4 construction activities. No critical habitat for any federally-listed species is present in the Alternative 4 area to be affected by construction.

The USACE has made a no effect determination for federally-listed species in accordance with requirements of Section 7 of the ESA. [Because there would be no 10-acre fill in the Northwest Slip in 2015 or later, the Port would not have a qualified biologist survey the area in the future for presence/use by federally listed species.](#)

#### **CEQA Impact Determination**

As described in **Impact BIO-1a** for the proposed Project, Alternative 4 construction activities would result in no loss of individuals or habitat for rare, threatened, endangered, protected, or candidate species, or Species of Special Concern, and impacts would be less than significant under CEQA. No impacts to marine mammals would occur because there would be no in-water work.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Residual impacts would be less than significant.

**NEPA Impact Determination**

Under this alternative, no development would occur within the in-water proposed Project area (i.e., no dredging, filling of the Northwest Slip or new wharf construction). Therefore, potential impacts under NEPA are not applicable since there would be no federal action under this alternative.

*Mitigation Measures*

Due to No Federal Action, mitigation is not applicable. No mitigation measures are necessary under NEPA.

*Residual Impacts*

With no mitigation required, there would be no residual impacts under NEPA.

**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***

Construction activities would not occur in Harbor waters in Alternative 4, and no EFH would be affected. Construction activities on land (including the Harry Bridges Boulevard widening and buffer area) would have no direct effects on EFH, which is [entirely](#) located in the water. Runoff of sediments and contaminants from such construction, however, could enter Harbor waters. As discussed in Section 3.13, implementation of sediment control measures (e.g., sediment barriers and sedimentation basins), as well as construction BMPs designed to reduce runoff of construction related pollutants, would minimize such impacts.

***Natural Habitat or Plant Community***

No marine natural habitats, plant communities (e.g., kelp or eelgrass beds), wetlands, or mudflats are present at or near the Alternative 4 site, and no construction would occur in Harbor waters. The least tern nesting site on Pier 400 SEA would not be affected by construction due to distance from the Alternative 4 site (more than three miles, 4.8 km).

**CEQA Impact Determination**

Construction would result in no reduction or alteration of EFH, resulting in no impacts under CEQA. Runoff of sediments or contaminants during storm events

would not substantially alter EFH because runoff from backland construction activities would be controlled as described in Section 3.13 through use of BMPs. Impacts would be less than significant under CEQA. No SEAs, kelp beds, eelgrass beds, mudflats, or wetlands would be affected by construction activities because none are present at or near the Alternative 4 site, resulting in no impacts.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Residual impacts would be less than significant for EFH, and no residual impacts would occur for natural habitats, special aquatic sites, or plant communities, including wetlands.

**NEPA Impact Determination**

Under this alternative, no development would occur within the in-water proposed Project area (i.e., no dredging, filling of the Northwest Slip or new wharf construction). Therefore, potential impacts under NEPA are not applicable since there would be no federal action under this alternative.

*Mitigation Measures*

Due to No Federal Action, mitigation is not applicable. No mitigation measures are necessary under NEPA.

*Residual Impacts*

With no mitigation required, there would be no residual impacts under NEPA.

**Impact BIO-2b: Operations 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***

Alternative 4 would have 251 less vessels per year than the proposed Project, 163 less than the CEQA baseline, and 167 less than the No Federal Action/NEPA Baseline. The reduced number of vessels per year during operations, compared to the proposed Project and the baselines, would eliminate impacts to EFH described in **Impact BIO-2b**. Operation of Alternative 4 facilities on land, including the buffer area, would not affect EFH because none is present on land. Runoff from the new facilities would not substantially reduce or alter EFH in Harbor waters because water quality standards for protection of marine life would not be exceeded due to the use of required BMPs and control measures (see Section 3.13).

### ***Natural Habitat or Plant Community***

No natural habitats or plant communities, SEAs, or special aquatic sites are present at or near the Alternative 4 site. Those in the Outer Harbor are more than three miles (4.8 km) from the site; and one mile (1.6 km) from the channels used for vessel movement through the Harbor to the West Basin. Mudflats are present along the Main Channel, and the small amount of project-related vessel traffic (less than for the proposed Project and for the baselines) would not affect this habitat. ~~none are in the vessel transit route through the Harbor to the West Basin.~~ Thus, proposed Project operations would not affect any of these habitats or plant communities.

### **CEQA Impact Determination**

Impacts of operations to EFH would be less than significant as described in **Impact BIO-2b** for the proposed Project because no EFH would be substantially reduced or altered. No impacts would occur to SEAs, natural habitats, special aquatic sites, or plant communities under CEQA because none of these habitats are present near the site, the small amount of project-related vessel traffic would not affect the mudflats along the Main Channel, and ~~or~~ the salt marsh and eelgrass beds in the Outer Harbor are not close to the vessel traffic lanes to the Alternative 4 berths.

### ***Mitigation Measures***

No mitigation is required.

### ***Residual Impacts***

Residual impacts would be less than significant for EFH. No residual impacts would occur for SEAs, natural habitats, special aquatic sites, and plant communities.

### **NEPA Impact Determination**

Under this alternative, no development would occur within the in-water proposed Project area (i.e., no dredging, filling of the Northwest Slip or new wharf construction). Therefore, potential impacts under NEPA are not applicable since there would be no federal action under this alternative.

### ***Mitigation Measures***

Due to No Federal Action, mitigation is not applicable. No mitigation measures are necessary under NEPA.

### ***Residual Impacts***

With no mitigation required, there would be no residual impacts under NEPA.

#### 3.3.4.3.2.5 Alternative 5 – Landside Terminal Improvements

**Impact BIO-1a: Construction activities would not cause a loss of individuals or 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.**

Construction activities from Alternative 5 would be limited to work on the existing backlands. These land areas provide no breeding or foraging habitat for any of the bird species in Table 3.3-1, except for the peregrine falcon, which could continue to hunt for prey (birds such as rock doves) over the area. This species forages throughout the Harbor area as described for the proposed Project in **Impact BIO-1b**. No prey would be lost due to Alternative 5 construction activities, only a small amount of foraging area would be temporarily affected, and the falcons could use areas away from the Alternative 5 backlands site during construction. No known peregrine falcon nesting areas (Vincent Thomas and Schuyler F. Heim bridges) would be affected due to distance from the Alternative 5 activities. The Vincent Thomas Bridge is over 0.5 mile (0.8 km) from Berth 147 and over 1.2 miles (1.9 km) from Northwest Slip, and the Schuyler R. Heim Bridge is over two miles (3.2 km) from the West Basin. Several of the species (e.g., double-crested cormorant, California gull, and California brown pelican) may use on-shore structures for resting at times, as described in **Impact BIO-1a** for the proposed Project, but other resting areas are available in the West Basin and throughout the Harbor. Thus, none of these species would be adversely affected by Alternative 5 construction activities. No critical habitat for any federally-listed species is present in the Alternative 5 area to be affected by construction.

The USACE has made a no effect determination for federally-listed species in accordance with requirements of Section 7 of the ESA. [Because there would be no 10-acre fill in the Northwest Slip in 2015 or later, the Port would not have a qualified biologist survey the area in the future for presence/use by federally listed species.](#)

#### **CEQA Impact Determination**

As described in **Impact BIO-1a** for the proposed Project, construction activities on land would result in no loss of individuals or habitat for rare, threatened, endangered, protected, or candidate species, or Species of Special Concern, and impacts would be less than significant under CEQA. No impacts to marine mammals would occur because there would be no in-water work.

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Residual impacts would be less than significant.



### **NEPA Impact Determination**

Under this alternative, no development would occur within the in-water proposed Project area (i.e., no dredging, filling of the Northwest Slip or new wharf construction). Therefore, potential impacts under NEPA are not applicable since there would be no federal action under this alternative.

#### *Mitigation Measures*

Due to No Federal Action, mitigation is not applicable. No mitigation measures are necessary under NEPA.

#### *Residual Impacts*

With no mitigation required, there would be no residual impacts under NEPA.

**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***

Construction activities would not occur in Harbor waters in Alternative 5, and no EFH would be affected. Construction activities on land (including the Harry Bridges Boulevard widening and buffer area and railyard relocation) would have no direct effects on EFH, which is entirely located in the water. Runoff of sediments and contaminants from such construction, however, could enter Harbor waters. As discussed in Section 3.13, implementation of sediment control measures (e.g., sediment barriers and sedimentation basins) and construction BMPs, would minimize such runoff.

#### ***Natural Habitat or Plant Community***

No marine natural habitats, plant communities (e.g., kelp or eelgrass beds), wetlands, or mudflats are present at or near the Alternative 5 site, and no construction would occur in Harbor waters. The least tern nesting site on Pier 400 SEA would not be affected by construction due to distance from the Alternative 5 site (more than three miles, 4.8 km).

### **CEQA Impact Determination**

Construction would cause no reduction or alteration of EFH, resulting in no impacts under CEQA. Runoff of sediments and contaminants during storm events would not substantially alter EFH because runoff from backland construction activities would be controlled as described in Section 3.13 through BMPs and control measures. No SEAs, kelp beds, eelgrass beds, mudflats, or wetlands would be affected by construction activities because none are present at or near the Alternative 5 site, resulting in no impacts.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Residual impacts would be less than significant for EFH, and no residual impacts would occur for SEAS, natural habitats, special aquatic sites, or plant communities, including wetlands.

**NEPA Impact Determination**

Under this alternative, no development would occur within the in-water proposed Project area (i.e., no dredging, filling of the Northwest Slip or new wharf construction). Therefore, potential impacts under NEPA are not applicable since there would be no federal action under this alternative.

*Mitigation Measures*

Due to No Federal Action, mitigation is not applicable. No mitigation measures are necessary under NEPA.

*Residual Impacts*

With no mitigation required, there would be no residual impacts under NEPA.

With no mitigation required, there would be no residual impacts under NEPA.

**Impact BIO-1b: Operations would not cause a loss of individuals or 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 [Landside Terminal Improvements Alternative](#) ~~Omni Terminal~~ would result in 163 fewer vessels per year than the CEQA baseline conditions and 167 less than the No Federal Action/NEPA Baseline (251 less than the proposed Project), and this would have no adverse effects on marine mammals compared to the baseline.

**CEQA Impact Determination**

Operational activities would result in no loss of individuals or habitat for rare, threatened, endangered, protected, or candidate species, or Species of Special Concern, and impacts would be less than significant under CEQA. Vessel traffic would have no impacts on marine mammals because the amount of traffic would be less than the baseline. No impacts to critical habitat would occur because no critical habitat is present.

*Mitigation Measures*

No mitigation is required.

### *Residual Impacts*

Residual impacts would be less than significant.

### **NEPA Impact Determination**

Under this alternative, no development would occur within the in-water proposed Project area (i.e., no dredging, filling of the Northwest Slip or new wharf construction). Therefore, potential impacts under NEPA are not applicable since there would be no federal action under this alternative.

### *Mitigation Measures*

Due to No Federal Action, mitigation is not applicable. No mitigation measures are necessary under NEPA.

### *Residual Impacts*

With no mitigation required, there would be no residual impacts under NEPA.

**Impact BIO-2b: Operations 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***

Alternative 5 would have 251 less vessels per year than the proposed Project, 163 less than the CEQA baseline, and 167 less than the No Federal Action/NEPA Baseline. The reduced number of vessels per year during operations, compared to the proposed Project and the baselines, would eliminate impacts to EFH described in **Impact BIO-2b**. Operation of Alternative 5 facilities on land, including the Harry Bridges Buffer Area and new railyard, would not affect EFH because none is present on land. Runoff from the new facilities would not substantially reduce or alter EFH in Harbor waters because water quality standards for protection of marine life would not be exceeded (see Section 3.13).

### ***Natural Habitat or Plant Community***

No natural habitats or plant communities, SEAs, or special aquatic sites are present at or near the Alternative 5 site. Those in the Outer Harbor are more than three miles (4.8 km) from the site; and [one mile \(1.6 km\) from the channels used for vessel movement through the Harbor to the West Basin. Mudflats are present along the Main Channel, and the small amount of project-related vessel traffic \(less than for the proposed Project and for the baselines\) would not affect this habitat. ~~none are in the vessel transit route through the Harbor to the West Basin.~~](#) Thus, project operations would not affect any of these habitats or plant communities.

### **CEQA Impact Determination**

Impacts of operations to EFH would be less than significant as described in **Impact BIO-2b** for the proposed Project because no EFH would be substantially reduced or

altered. No impacts would occur to natural habitats, special aquatic sites, or plant communities under CEQA because none of these habitats are present near the site, the small amount of project-related vessel traffic would not affect the mudflats along the Main Channel, and the salt marsh and eelgrass beds in the Outer Harbor are not close to the ~~or~~ vessel traffic lanes to the Alternative 5 berths.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Residual impacts would be less than significant for EFH. No residual impacts would occur for SEAs, natural habitats, special aquatic sites, and plant communities.

**NEPA Impact Determination**

Under this alternative, no development would occur within the in-water proposed Project area (i.e., no dredging, filling of the Northwest Slip or new wharf construction). Therefore, potential impacts under NEPA are not applicable since there would be no federal action under this alternative.

*Mitigation Measures*

Due to No Federal Action, mitigation is not applicable. No mitigation measures are necessary under NEPA.

*Residual Impacts*

With no mitigation required, there would be no residual impacts under NEPA.

**3.3.4.3.3 Summary of Impact Determinations**

**Table 3.3-6. Summary Matrix of Potential Impacts and Mitigation Measures for Biological Resources Associated with the Proposed Project and Alternatives (continued)**

<i>Alternative</i>	<i>Environmental Impacts*</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
<b>3.3 Biological Resources (continued)</b>				
<a href="#">Proposed Project</a>	<b>BIO-4c:</b> Operation of the new facilities in the West Basin has a <a href="#">low</a> potential to introduce non-native species into the Harbor that could disrupt local biological communities.	CEQA: Significant impact NEPA: Significant impact	No feasible mitigation is currently available No feasible mitigation is currently available	CEQA: Significant impact NEPA: Significant impact
Alternative 1 (continued)	<b>BIO-4a:</b> <del>Dredging, filling, and wharf</del> construction activities would not substantially disrupt local biological communities.	CEQA: No impact NEPA: Not applicable	Mitigation not required Mitigation not required	CEQA: No impact NEPA: Not applicable
	<b>BIO-5:</b> <del>Operation of the new facilities would not substantially disrupt local biological communities</del> <a href="#">No permanent loss of marine habitat would occur.</a>	CEQA: No impact NEPA: Not applicable	Mitigation not required Mitigation not required	CEQA: No impact NEPA: Not applicable
	<b>BIO-4c:</b> Operation of the <del>new-existing</del> facilities in the West Basin has a <a href="#">low</a> potential to introduce non-native species into the Harbor that could disrupt local biological communities.	CEQA: Significant impact NEPA: Not applicable	No feasible mitigation is currently available Mitigation not required	CEQA: Significant impact NEPA: Not applicable
Alternative 2	<b>BIO-1a:</b> Construction activities would not cause a loss of individuals or 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.	CEQA: Less than significant impact NEPA: Less than significant impact <a href="#">for in-water work; no impacts for backlands improvements</a>	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
	<b>BIO-4a:</b> <del>Dredging, filling, and wharf</del> construction activities would not substantially disrupt local biological communities.	CEQA: Less than significant impact NEPA: Less than significant impact for in-water work; no impact for backland improvements	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact for in-water work; no impact for backland improvements

**Table 3.3-6. Summary Matrix of Potential Impacts and Mitigation Measures for Biological Resources Associated with the Proposed Project and Alternatives (continued)**

<i>Alternative</i>	<i>Environmental Impacts*</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
<b>3.3 Biological Resources (continued)</b>				
	<b>BIO-4c:</b> Operation of the new facilities in the West Basin has a <u>low</u> potential to introduce non-native species into the Harbor that could disrupt local biological communities.	CEQA: Significant impact NEPA: Significant impact	No feasible mitigation is currently available No feasible mitigation is currently available	CEQA: Significant impact NEPA: Significant impact
<a href="#">Alternative 3</a>	<b>BIO-3b:</b> Operations of <del>proposed Project facilities</del> activities would not interfere with wildlife movement/migration corridors.	CEQA: No impact NEPA: No impact	Mitigation not required Mitigation not required	CEQA: No impact NEPA: No impact
	<b>BIO-4c:</b> Operation of the new facilities in the West Basin has a <u>low</u> potential to introduce non-native species into the Harbor that could disrupt local biological communities.	CEQA: Significant impact NEPA: Significant impact	No feasible mitigation is currently available No feasible mitigation is currently available	CEQA: Significant impact NEPA: Significant impact
<a href="#">Alternative 4</a>	<b>BIO-4c:</b> Operation of the new facilities in the West Basin has a <u>low</u> potential to introduce non-native species into the Harbor that could disrupt local biological communities.	CEQA: No impact NEPA: Not applicable	Mitigation not required Mitigation not required	CEQA: No impact NEPA: Not applicable
Alternative 5 (continued)	<b>BIO-4c:</b> Operation of the new facilities in the West Basin has a <u>low</u> potential to introduce non-native species into the Harbor that could disrupt local biological communities.	CEQA: No impact NEPA: Not applicable	Mitigation not required Mitigation not required	CEQA: No impact NEPA: Not applicable
* Unless otherwise noted, all impact descriptions for each of the Alternatives are the same as those described for the proposed Project				

1 **3.3.5 Significant Unavoidable Impacts**