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## Section 3.3 Biological Resources

### 4 SECTION SUMMARY

5 This section identifies the biological resources at the project site and analyzes the effects of the Proposed  
6 Project on biological resources at, and adjacent to, the project site. The Project site is described in Section  
7 2.5 of Chapter 2, Project Description, and presented in figures 2-3 and 2-4. The Proposed Project would  
8 construct a 1,260-linear-foot concrete wharf, supported by 650 concrete piles, on the footprint of the  
9 existing wharf at Berths 126-129. The primary features of the Proposed Project that could affect  
10 biological resources include: wharf demolition, piling removal, and riprap removal; shoreline  
11 reconstruction; pile driving and wharf construction; dredging and dredge material disposal; and vessel  
12 operations.

13 Section 3.3, Biological Resources, covers the following:

- 14     ▪ the environmental setting of the Proposed Project, including the terrestrial habitats and biological  
15     communities;
- 16     ▪ Essential Fish Habitat (EFH) and managed species in the Proposed Project vicinity;
- 17     ▪ local, state, and federal regulations and policies regarding biological resources that are applicable  
18     to the Proposed Project;
- 19     ▪ the methodology used to determine whether the Proposed Project would adversely affect  
20     biological resources at the project site or in the project area;
- 21     ▪ an impact analysis of the Proposed Project; and
- 22     ▪ mitigation measures proposed to reduce significant impacts.

#### 23 Key Points of Section 3.3:

24 Impact driving of piles at the Project site could potentially result in Level A harassment (i.e., injury to  
25 marine mammals close to the pile driving and Level B harassment (i.e., disturbance) in the general  
26 vicinity of the pile driving activity. This would be considered a significant impact. However, with  
27 implementation of mitigation measure MM BIO-1 these impacts would be less than significant.

28     **MM BIO-1: Protect marine mammals.** Although it is expected that marine mammals will  
29 voluntarily move away from the area at the commencement of the vibratory or “soft start” of  
30 pile-driving activities, as a precautionary measure, pile-driving activities will include  
31 establishment of a safety zone, by a qualified marine mammal professional, and the area  
32 surrounding the operations (including the safety zones) will be monitored for marine

1 mammals by a qualified marine mammal observer<sup>1</sup>. The pile driving site will move with each  
2 new pile; therefore, the safety zones will move accordingly.

3 Impacts from construction activities that have the potential to introduce or redistribute invasive species  
4 would be less than significant because the construction area would be surveyed to determine the presence  
5 of *Caulerpa* before in-water construction activities.

6 With respect to operation, since the Proposed Project would increase the annual ship calls by only three  
7 vessels relative to the CEQA baseline, compliance with applicable regulations would limit the potential  
8 for introduction of non-native species into the Harbor via ballast water or vessel hulls, and impacts would  
9 be less than significant. The potential for introduction of exotic species via vessel hulls would be  
10 increased in proportion to the increase in number of vessels, and alternatives 1 and 2 would both involve a  
11 larger increase in vessel calls above the CEQA baseline (up to 55 vessels) than would the Proposed  
12 Project (3 vessels). Although, given existing control measures, alternatives 1 and 2 have a low potential to  
13 increase the introduction of non-native species into the Harbor that could substantially disrupt local  
14 biological communities, such effects could still occur and would represent a significant impact. There are  
15 currently no feasible mitigation measures to reduce the potential for introduction of invasive species via  
16 hull fouling. Accordingly, impacts due to the introduction of invasive species under the No Project and  
17 No Federal Action alternatives are considered significant and unavoidable under CEQA.

18 The Proposed Project's vessel traffic at full operation (156 calls per year) would be substantially lower  
19 than the NEPA baseline (208 calls per year). Accordingly, the Proposed Project's impacts related to  
20 invasive species would be less than significant under NEPA. Because the No Federal Action Alternative  
21 is identical to the NEPA baseline, that alternative would have no impacts under NEPA. The No Project  
22 Alternative is not analyzed under NEPA.

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<sup>1</sup> Marine mammal professional qualifications shall be identified based on criteria established by the Los Angeles Harbor Department (LAHD) during the construction bid specification process. Upon selection as part of the construction award winning team, the qualified marine mammal professional shall develop site specific pile-driving safety zone requirements, which shall follow the National Oceanic and Atmospheric Administration (NOAA) Fisheries Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (NOAA Fisheries 2024) in consultation with the Acoustic Threshold White paper prepared for this purpose by LAHD (LAHD 2017b). Final pile-driving safety zone requirements developed by the selected marine mammal professional shall be submitted to LAHD Construction and Environmental Management Divisions prior to commencement of pile-driving.

### 3.3.1 Introduction

This section identifies the existing conditions of biological resources at the project site and analyzes the effects of the Proposed Project and alternatives on biological resources at and near the project site. The primary features of the Proposed Project and alternatives that could affect these resources are associated with construction and operation (described in Section 2.6), and include:

- Demolishing approximately 1,260 feet of existing wharf, removing approximately 900 supporting piles, and reconstructing the rock dike under the wharf along the alignment of the existing dike;
- Dredging and disposing of approximately 310,000 cubic yards (cy) of sediment from Berths 126-129;
- Installing approximately 650 24-inch-diameter concrete piles, constructing a new 1,260-linear-foot concrete wharf on the footprint of the existing wharf, installing up to ten new wharf cranes;
- Expanding an existing intermodal railyard in the terminal backlands; and
- Operating the terminal until 2062.

This analysis assumes, pending additional sediment testing, that in-port and beach replenishment disposal options would not be available and that the ocean disposal option would be limited. Accordingly, this Draft EIS/EIR assumes approximately 260,000 cy of dredged material would be disposed of at an approved inland disposal facility and the remaining approximately 50,000 cy would be disposed of at the approved LA-2 ocean disposal site. Construction of the new wharf would not alter the existing pierhead line.

### 3.3.2 Environmental Setting

The Port of Los Angeles (Port) is part of the larger Los Angeles-Long Beach Port Complex in San Pedro Bay. The Port consists of approximately 7,500 acres of land and water, approximately 3,200 acres of which is open-water habitat. In addition to extensive industrial cargo facilities, the Port supports commercial water-related activities such as cruise ships, sportfishing and commercial fishing, recreational boating, and maritime support facilities.

The Port has been an active port for over 100 years and has undergone significant physical changes associated with its development, including the construction of the San Pedro and Middle Breakwaters, deepening of navigational channels and basins, and creation of new land, via dredging and filling former marshes and open-water areas, to support cargo terminals and other Port facilities. These changes have resulted in basin, channel, dock/piling, riprap, and open-water habitats. The Port also includes isolated pockets of salt and freshwater wetlands, mudflats, and sandy beach. The Port is in a highly urbanized setting, surrounded by industrial, commercial, and residential areas.

Harbor waters are subjected to continuous vessel traffic and periodic construction activities such as wharf construction, dredging, and filling. Commercial vessels and recreational boats produce high levels of underwater noise. For example, ambient noise in San Francisco Bay/Oakland Harbor has been estimated at 120 to 155 dB<sub>PEAK</sub> (the peak sound pressure level in decibels) (ICF and Illingworth & Rodkin 2009), and a baseline hydroacoustic study in Cerritos Channel (connecting Los Angeles and Long Beach Harbors) recorded L<sub>90</sub> values (sound levels that were exceeded 90% of the time during the measurement period) of 120 to 132 decibels (dB) (Tetra Tech 2011). By comparison,

1 ambient underwater noise in the open ocean off the central California coast has been  
2 estimated at 74 to 100 dB<sub>PEAK</sub> (Caltrans 2020).

3 Biological resources in the Port have been described in several environmental documents,  
4 including the Los Angeles and Long Beach Deep Draft Navigation Improvement  
5 Environmental Impact Statement (EIS)/ Environmental Impact Report (EIR) (United  
6 States Army Corps of Engineers (USACE) and LAHD 1992), the Pier 400 Container  
7 Terminal and Transportation Corridor Project (LAHD 1999), and regular biological  
8 surveys (MEC 1988; MEC and Associates 2002; SAIC 2010; MBC 2016; Wood E&IS  
9 2021). The 2000 study (MEC and Associates 2002) was the first survey that specifically  
10 discussed non-native taxa that have been introduced over time into the Port.

11 Over the years, the Ports of Los Angeles and Long Beach have worked with the state and  
12 federal resource agencies to conduct periodic biological surveys within the Port Complex  
13 to assess biological conditions of the various harbor habitats; the most recent evaluation  
14 was conducted in 2018-2019 (Wood E&IS 2021). Based on those assessments, the  
15 resource agencies and the Ports determine marine habitat values and evaluate the  
16 potential impacts of Port projects on marine resources. The periodic surveys have  
17 documented an increase in habitat value over time and have supported a division of the  
18 Port Complex into Inner Harbor, Outer Harbor, and Outer Harbor Deep and Shallow  
19 habitats. Although it is still valuable habitat, the Inner Harbor is considered by the  
20 resource agencies to have lower habitat value to wildlife than the Outer Harbor habitats,  
21 primarily because of restricted water circulation and legacy pollution. This area is  
22 designated as “Constrained Harbor Habitat” in the Port’s habitat mitigation bank enabling  
23 instrument (LAHD 2017a). In the Port of Los Angeles, the Inner Harbor includes much  
24 of the harbor north of the Vincent Thomas Bridge, including the West Basin, where the  
25 Proposed Project is located.

26 Marine resources along the California coast, and within the Port fluctuate on both a  
27 seasonal basis due to changes in factors such as water temperature and rainfall, and on a  
28 longer-term basis due to large-scale oceanographic processes. The most notable trends  
29 affecting biological communities within the Port Complex are the long-term climate  
30 patterns, such as “El Niño” and “La Niña” measured by the Oceanic Niño Index (ONI),  
31 and the more recently recognized phenomenon of marine heatwaves that can evolve and  
32 persist in the Northeastern Pacific Ocean (Jacox et al. 2019). Substantial improvements in  
33 water quality in the Port occurred following enactment of the Clean Water Act of 1972,  
34 as documented by a series of environmental studies known as the Harbors Environmental  
35 Project performed by the University of Southern California (USC) in the 1970s and mid-  
36 1980s. Further improvements in marine resources have occurred since that time (MEC  
37 and Associates 2002; SAIC 2010; MBC 2016; Wood E&IS 2021), although changes have  
38 been more gradual than in the previous period. The types of habitats (shallow and deep  
39 pelagic, soft-bottom benthic, and riprap and piling) in the Port, and most of the species  
40 associated with those habitats, have remained fairly stable over time, as described below.  
41 Perhaps the most significant recent changes have been the expansion of eelgrass (*Zostera*  
42 *marina*) habitat at Inner Cabrillo Beach and the Pier 300 Shallow Water Habitat/Seaplane  
43 Lagoon, and the expansion of giant kelp beds along the Outer Harbor breakwaters and  
44 piers (MEC and Associates 2002; SAIC 2010; MBC 2016; Wood E&IS 2021).

45 A review of public records conducted for the YTI Terminal project (LAHD 2014) is  
46 applicable to the Proposed Project given the close proximity and similar nature of the two  
47 projects and their setting. Biologists reviewed aerial photographs and information on  
48 sensitive plant and animal species that could potentially occur in the area from the

1 California Natural Diversity Database (CNDDDB) and California Native Plant Society  
2 (CNPS) (San Pedro and Long Beach Quadrangles). The CNDDDB included species listed  
3 as threatened or endangered (or proposed for listing) by the California Fish and Game  
4 Commission, the U.S. Secretary of the Interior (for the U.S. Fish and Wildlife Service  
5 [USFWS]), and the U.S. Secretary of Commerce (for the National Oceanographic and  
6 Atmospheric Administration [NOAA]).

7 Based on the information summarized above, data from the biological surveys conducted  
8 in 2000 through 2019 accurately reflect current environmental conditions at the Project  
9 site because those conditions have remained reasonably stable. Where possible, site-  
10 specific data from sampling locations (stations) adjacent to the Berths 121-131 Terminal  
11 were used to characterize the biological communities. Data from biological surveys prior  
12 to 2000 are used for context.

### 13 3.3.2.1 Terrestrial Habitats

14 All of the project site and most adjacent areas are developed and paved. Accordingly,  
15 very little vegetation or terrestrial habitat exists on site and there is little or no suitable  
16 habitat for native animal species. Vegetation within the terminal consists entirely of  
17 isolated stands of introduced ornamentals (palms, eucalyptus, and bougainvillea) near the  
18 entry gate and administration building, and non-native grasses and weeds (tarweeds,  
19 dandelions) growing from cracks in the pavement and barriers and along fence lines and  
20 other borders. Areas adjacent to the terminal support lawns, introduced ornamental trees  
21 and shrubs, and non-native weeds, shrubs, and grasses.

22 The majority of wildlife species that have the potential to occur within the area are  
23 adapted to human-disturbed landscapes. These include various common insects; native  
24 lizards; and a variety of native and non-native small mammals, including Norway rat  
25 (*Rattus norvegicus*), black rat (*R. rattus*), house mouse (*Mus musculus*), Virginia  
26 opossum (*Didelphis virginiana*), and feral cats (*Felis catus*) (LAHD 2012). Bats are  
27 known to occur in the Port, where they roost under bridges; building crevices and eaves  
28 are also potential habitats for bats. Yuma and Mexican free-tailed bats (*Myotis*  
29 *yumanensis* and *Tadarida brasiliensis*, respectively) are the most likely to occur (Port of  
30 Long Beach and Caltrans 2010).

31 A number of upland bird species may be found at and near the project site. Rock pigeon  
32 (*Columba livia*) and barn swallow (*Hirundo rustica*) were the most abundant upland bird  
33 species in the 2018 Biological Surveys (Wood E&IS 2021); other abundant species  
34 included American crow (*C. brachyrhynchus*), European starling (*Sturnus vulgaris*), and  
35 common raven (*Corax corax*). These common species are adapted to urban and disturbed  
36 habitats. Rock pigeon and European starling are non-native species.

37 Several of the above-mentioned bird species may nest at the site. For example, the 2013  
38 and 2018 biological surveys (MBC 2016, Wood E&IS 2021) observed nesting in various  
39 parts of the Port by rock pigeons, house sparrows, American crows, cliff swallows, and  
40 barn swallows. Swallows, sparrows, and rock pigeons often nest under eaves and dock  
41 structures, and hummingbirds, starlings, warblers, finches, and house sparrows  
42 commonly nest in shrubs and palm trees (LAHD 2012); all of these features are present at  
43 or near the project site.

44 Several raptors occur in the Port, including American kestrel (*Falco sparverius*),  
45 Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), peregrine  
46 falcon (*Falco peregrinus*), and osprey (*Pandion haliaetus*) (MBC 2016, Wood E&IS

2021). Peregrine falcons have been reported as nesting on several bridges in Los Angeles-Long Beach Harbor (MEC and Associates 2002, SAIC 2010). Hawks and ospreys have generally not been observed nesting in the Port, the only observation being of an osprey nesting (although not near the Project site) during the 2018 Biological Surveys (Wood E&IS 2021).

### 3.3.2.2 Marine Habitats

#### Benthic Environments

##### *Soft-Bottom Habitats*

Benthic organisms are those associated with seafloor sediments; animals that live within soft sediments, primarily invertebrate species, are referred to as infauna, while those living on the sediment surface are referred to as epifauna. Fish primarily associated with the soft-bottom habitat are known as demersal fish. Benthic marine organisms are an important component of the food web and are indicators of environmental quality. Since the 1950s, improvements in water quality have aided the establishment of diverse assemblages of benthic organisms in areas that were once largely devoid of marine life, and currently at least 369 species of infaunal invertebrates and 121 species of epifaunal invertebrates occur in the Port Complex (Wood E&IS 2021).

As summarized in a Harbor Environmental Projects report (HEP 1980) and Wood E&IS (2021), sampling studies in the 1950s through the 1970s showed that the pollution-tolerant polychaetes *Cossura candida* and *Tharyx parvus* were the most abundant benthic organism in soft-bottom samples. An assessment of dominant species in the Port Complex in 2000 (MEC and Associates 2002) found that *T. parvus* was no longer among the ten most abundant species, although a number of other pollution-tolerant species were still abundant at Inner Harbor stations. That study's data indicated a gradient of increasing environmental stress (enrichment and contamination) from the Outer Harbor to the Inner Harbor and from basins to slips. The 2008 Biological Surveys (SAIC 2010) documented relatively similar abundances between the Inner Harbor and Outer Harbor but found that abundances at Outer Harbor shallow-water stations were markedly higher than those in deeper water. Furthermore, the benthic assemblages at Inner Harbor stations were distinctly different from those at Outer Harbor stations, being characterized by higher proportions of pollution-tolerant species. The 2013 Biological Surveys (MBC 2016) found that, for the first time, a pollution-sensitive crustacean, the amphipod *Amphideutopus oculatus*, was the most abundant benthic infaunal species in the Port Complex, which was also the case in the 2018 Biological Surveys (Wood E&IS 2021). Over time, therefore, benthic assemblages throughout the Port Complex have indicated a trend towards increasingly healthy environmental conditions.

At the Project site, the benthic habitat consists of the sediments at the bottom of the West Basin, which the most recent harbor-wide biological surveys (Wood E&IS 2021) characterized as sandy silt. That survey characterized the benthic community at three sampling stations (LA5, LA13, and LA15) in and adjacent to the West Basin. The benthic infauna at those stations was made up of 22 to 48 different species, dominated by polychaete worms, crustaceans (mostly amphipods), and molluscs (small clams and snails). The most abundant species at stations LA5 and LA13, in the West Basin, were the polychaetes *Cossura* sp. A, *Mediomastus* sp., and *Kirkegaardia siblina*, the crustaceans *Eochelidium* sp.A, *Scleroplax granulata*, *Listriella goleta*, and pinnotherid

1 crabs, and the Asian clam *Theora lubrica* (a non-native species). The infauna at Station  
2 LA15, in the Turning Basin, was dominated by oligochaete worms, the polychaetes  
3 *Euchone limnicola* and *Mediomastus* sp., the crustaceans *Eochelidium* sp. A and  
4 *Amphideutopus oculatus*, and the phoronid worm *Phoronis* sp. The biomass of infauna  
5 near the Project site in 2018 ranged from 0.5 g/m<sup>2</sup> at Station LA15 in spring to 4.1 g/m<sup>2</sup>  
6 at Station LA5 in spring, with a mean of approximately 1.9 g/m<sup>2</sup> (Wood E&IS 2021).

7 Crustaceans (shrimp and crabs) constitute most of the epifaunal invertebrate species and  
8 over 90 percent of the total abundance in the Port Complex. The 2018 Biological Surveys  
9 survey collected 31 species and 845 organisms at Station LA5 in the West Basin, and 27  
10 species and 691 individuals at Station LA15 in the nearby Turning Basin (Wood E&IS  
11 2021). Target shrimp (*Sicyonia penicillata*), tunicates (*Styela* spp., *Mogula* sp., and *Ciona*  
12 sp.), and swimming crabs (*Portunus xanthusi*) were the most abundant species collected  
13 at LA5 and LA15.

14 Two species of demersal fish, white croaker (*Genyonemus lineatus*) and queenfish  
15 (*Seriphus politus*), have dominated the demersal fish assemblage in the Port Complex  
16 since sampling began in the 1970s (MEC and Associates 2002; SAIC 2010; MBC 2016;  
17 Wood E&IS 2021). Other consistently abundant species include white surfperch  
18 (*Phanerodon furcatus*), California tonguefish (*Symphurus atricauda*), speckled sanddab  
19 (*Citharichthys stigmaeus*), barred sand bass (*Paralabrax nebulifer*), staghorn sculpin  
20 (*Leptocottus armatus*), California halibut (*Paralichthys californicus*), specklefin  
21 midshipman (*Porichthys myriaster*), and shiner surfperch. More recently, California  
22 lizardfish (*Synodus lucioceps*) has been among the most abundant demersal species.  
23 Several recreationally important species, such as California halibut and barred sand bass,  
24 are common in the Port Complex.

25 The 2018 Biological Surveys collected 59 species and over 28,000 individuals of  
26 demersal fish. However, relatively few fish were collected in the Project area: in four  
27 sampling events, 12 species and 174 fish were collected at Station LA5 and 16 species  
28 and 142 fish at LA15 (Wood E&IS 2021). The most abundant demersal species collected  
29 by otter trawl at the two stations were white croaker, queenfish, specklefin midshipman,  
30 and barred sand bass; no species of the Pacific Coast Groundfish Fisheries Management  
31 Plan (FMP; see Section 3.3.2.7) were captured in the West Basin during the 2018  
32 Biological Surveys.

### 33 **Hard Substrate Habitats**

34 Hard surfaces in the waters of Los Angeles Harbor include rock dikes and riprap  
35 (shoreline protection composed of boulders, cobbles, and recycled concrete); concrete,  
36 steel, and timber pilings; sheet piling; and concrete or timber seawalls. Wharf structures  
37 and piers, with their thousands of pilings and miles of shoreline protection, form  
38 extensive hard substratum supporting a rich community of marine organisms. Given the  
39 prevalence of riprap in the harbor, the marine invertebrate and algal communities  
40 inhabiting these hard surfaces are known in biological surveys of the Port Complex as the  
41 “riprap biota.” The shoreline of the Project site consists entirely of riprap and wharf  
42 pilings.

43 Riprap and piling biota were sampled throughout the Port Complex, including in the  
44 West Basin, in the 2018 Biological Surveys (Wood E&IS 2021). On these substrates, the  
45 upper intertidal is typically characterized by barnacles and bare rock and the mid-lower  
46 intertidal and the subtidal by a diverse assemblage of marine organisms, including  
47 mussels, red algae, and many species that cannot withstand the harsh conditions of the

1 upper intertidal, such as green and brown algae, amphipods, sabellid and spirorbid  
2 worms, bryozoans, brittle stars, urchins, and tunicates.

3 Algae are important components of the riprap and piling communities. The 2018  
4 Biological Surveys found that the most abundant algae at the West Basin piling station  
5 (T19) were the green alga *Ulva californica*, the brown algae *Colpomenia* spp. and  
6 *Undaria pinnatifida*, and turf-forming and coralline red algae. Riprap (station LARR3)  
7 was dominated by coralline and crustose red algae and non-native brown algae  
8 (principally *Sargassum* spp. but including *U. pinnatifida*). Although giant kelp  
9 (*Macrocystis pyrifera*) is common on the riprap in the Outer Harbor, it is not found in the  
10 Inner Harbor, including the West Basin.

## 11 Water Column Habitats

12 The water column habitat at the Project site consists of the waters of the West Basin.  
13 Organisms in the water column include pelagic (meaning they swim freely throughout the  
14 water column) juvenile and adult fish, fish eggs and larvae (ichthyoplankton), and small,  
15 free-floating plants (phytoplankton) and animals (zooplankton). Unlike the benthic and  
16 riprap biota, the organisms that live in the water column tend to swim or be carried by  
17 currents over wide areas. Accordingly, the abundance and species composition of the  
18 water column community tends to vary considerably in time and space, and the  
19 organisms collected in a sample at a given point and time are not necessarily resident  
20 there.

21 The water column community of the West Basin was characterized by ichthyoplankton  
22 and pelagic fish sampling conducted at two stations (LA5 and LA15) during the 2018  
23 Biological Surveys (Wood E&IS 2021).

### 24 *Plankton and Ichthyoplankton*

25 The phytoplankton and zooplankton communities of the Port Complex are generally not  
26 sampled in routine biological surveys, having been thoroughly described in earlier studies  
27 (e.g., HEP 1980, from which the following summary is taken). Phytoplankton consists  
28 largely of diatoms, such as *Chaetoceros* spp. and *Skeletonema costatum*, unicellular  
29 flagellates, and dinoflagellates such as *Prorocentrum micans*, *Dinophysis caudata*, and  
30 *Noctiluca scintillans*. In basins and slips, runoff of nutrients from the land and restricted  
31 circulation sometimes lead to bloom conditions, in which phytoplankton grow to dense  
32 concentrations before being dispersed by wind and current or subsiding after depleting  
33 the nutrients. In the late summer and fall these episodes can result in so-called “red tides”  
34 in which the water is discolored by high concentrations of dinoflagellates. The  
35 zooplankton community in the Port Complex is dominated by copepods such as *Acartia*  
36 spp., *Oithona* spp., and *Paracalanus parvus*, and by cladocerans. These organisms feed  
37 on phytoplankton and are in turn consumed by fish larvae, suspension-feeding  
38 invertebrates such as anemones and corals, and plankton-eating adult fish such as  
39 anchovies and sardines.

40 The ichthyoplankton is dominated by species that are also common in the Port Complex  
41 as adults. During the 2018 Biological Surveys, the mean densities of fish eggs harbor-  
42 wide were highest during the spring survey (568 eggs/100 m<sup>3</sup>) and lowest during the  
43 summer survey (182 eggs/100 m<sup>3</sup>) (Wood E&IS 2021); Station LA5 accounted for one-  
44 third of the eggs collected in the entire spring survey, but in summer and fall, egg  
45 densities at LA5 and LA15 were lower than the harbor-wide mean. Most fish eggs are

1 unidentifiable to species, but of the ones that could be identified, turbot eggs were the  
2 most abundant.

3 As in previous biological surveys (MEC and Associates 2002, SAIC 2010, MBC 2016),  
4 the most abundant larval fish taxa in the 2018 Biological Surveys were gobies (the genera  
5 *Clevelandia*, *Ilypnus*, *Quietula*, *Lepidogobius*, *Tridentiger*, and *Acanthogobius*); blennies,  
6 northern anchovy (*Engraulis mordax*), and white croaker (*Genyonemus lineatus*) were  
7 also prominent in the ichthyoplankton. These harbor-wide patterns were generally true at  
8 sampling stations LA5 and LA15, although gobies and blennies comprised a greater  
9 proportion of the larval fish than harbor-wide (Wood E&IS 2021).

### 10 **Juvenile and Adult Fish**

11 The Port Complex provides habitat for more than 130 species of juvenile and adult fish;  
12 some of them are transient visitors and some are permanent residents (MEC 1988, MEC  
13 and Associates 2002, Allen and Pondella 2006, SAIC 2010, MBC 2016, Wood E&IS  
14 2021). The pelagic fish assemblage in the Port Complex has been consistently dominated  
15 by northern anchovy; it typically accounts for over two-thirds of the individuals (MEC  
16 and Associates 2002, SAIC 2010, MBC 2016), although in the 2018 Biological Surveys it  
17 was the second-most abundant pelagic fish and accounted for only one-quarter of the  
18 abundance (Wood E&IS 2021). Other commonly caught pelagic species include topsmelt  
19 (*Atherinops affinis*; the most abundant pelagic fish in 2018), jacksmelt (*Atherinopsis*  
20 *californiensis*), California grunion (*Leuresthes tenuis*), Pacific sardine (*Sardinops sagax*),  
21 Pacific mackerel (*Scomber japonicus*), and jack mackerel (*Trachurus symmetricus*).

22 Sampling for pelagic fish conducted during the 2018 Biological Surveys at Station LA5  
23 captured a total of 427 fish and sampling at Station LA15 collected 381 fish. The  
24 majority of the fish captured at both stations were topsmelt, and most were caught at  
25 night (Wood E&IS 2021). All four of the fish species in the Coastal Pelagics FMP  
26 (northern anchovy, Pacific mackerel, jack mackerel, and Pacific sardine) were captured at  
27 the two West Basin sampling stations, although only sardines were abundant.

### 28 **Water Birds**

29 Numerous water-associated birds use the Port Complex both as residents and as seasonal  
30 visitors. The 2018 Biological Surveys recorded 64 species in the Port Complex that  
31 depend on marine habitats and another 23 species of upland birds (Wood E&IS 2021).  
32 Gulls, aerial fish foragers (terns and pelicans) and waterfowl (grebes, cormorants, ducks)  
33 were the dominant groups observed throughout the Port Complex, as was the case in  
34 previous biological surveys (MEC and Associates 2002, SAIC 2010, MBC 2016). Large  
35 and small shorebirds, wading/marsh birds, upland birds, and raptors were also present,  
36 but in much smaller numbers. The most abundant species, in order of decreasing  
37 abundance, were western gull (*Larus occidentalis*), western grebe (*Aechmophorus*  
38 *occidentalis*), elegant tern (*Thalasseus elegans*), rock pigeon (*Columba livia*, an upland  
39 bird), Brandt's cormorant (*Phalacrocorax penicillatus*), brown pelican (*Pelecanus*  
40 *occidentalis californicus*), double-crested cormorant (*P. auritus*), Heermann's gull (*L.*  
41 *heermanni*), surf scoter (*Melanitta perspicillata*), and great blue heron (*Ardea herodias*).

42 In the West Basin near the Project site (survey zones 31, 32, and 33 in Wood E&IS  
43 2021), the 2018 Biological Surveys identified a total of 1,268 individual birds in 12  
44 monthly surveys, mostly gulls, grebes, great blue herons, and cormorants. The 2008  
45 Biological Surveys (SAIC 2010) noted that the West Basin area generally supported  
46 fewer birds than other areas of the Port Complex because of the scarcity of foraging

1 opportunities, and recent studies recorded very few aerial fish foragers in Inner Harbor  
2 areas such as the West Basin (MBC 2016; Wood E&IS 2021).

### 3 **Special-Status Species**

4 A number of marine animal species that are considered by federal and state resource  
5 agencies to have special status have historically been observed, or have the potential to  
6 occur in the Port (Table 3.3-1). These comprise 26 species of birds, 5 species of marine  
7 mammals, and one marine reptile species. In addition, a number of fish species found in  
8 the harbor are subject to management under the Magnuson-Stevens Fishery Conservation  
9 and Management Act (see Section 3.3.2.7 and Section 3.3.3.4).

#### 10 ***Threatened or Endangered Bird Species***

11 Four species of birds (snowy plover, *Charadrius alexandrinus nivosus*; Belding's  
12 savannah sparrow, *Passerculus sandwichensis beldingi*; Scripp's murrelet,  
13 *Synthliboramphus scrippsi*; and California least tern, *Sternula antillarum browni*) that  
14 occur or have occurred in the Port Complex are listed by federal and/or state agencies as  
15 threatened or endangered. The federally threatened western snowy plover is a transient  
16 migratory visitor; a few individuals have been observed on Pier 400 in recent decades  
17 (Keane Biological Consulting 2005a, 2005b), but the species was not observed in the Port  
18 during the 2000, 2008, 2013, or 2018 biological surveys (MEC and Associates 2000,  
19 SAIC 2010, MBC 2016, Wood E&IS 2021). Furthermore, there is no suitable nesting  
20 habitat (i.e., sandy, dune-backed beaches) in the vicinity of the Project site.

21 The state-listed endangered Belding's savannah sparrow is only found in pickleweed  
22 marshes (USACE and LAHD 1992). No suitable habitat for this species is present in the  
23 area of the Proposed Project, and there have been no sightings of this species in the Port  
24 since the early 1970s (and then only as strays).

25 Scripp's murrelet, a small seabird that nests on the Channel Islands, is very occasionally  
26 spotted in the Outer Harbor. One was observed in Fish Harbor during the 2013 Biological  
27 Surveys (MBC 2016) but none were observed during the other three harbor-wide  
28 biological surveys (MEC and Associates 2000, MBC 2010, Wood E&IS 2021). Because  
29 there is no nesting habitat for the species in the Harbor and it is so rarely observed, this  
30 species is not considered further in this analysis.

31 The California least tern was federally listed as fully protected in 1970 and state listed as  
32 endangered in 1971. Loss of nesting and nearby foraging habitat due to human activities  
33 caused a decline in the number of breeding pairs (USFWS 1992). The biology of this  
34 species has been described in the Biological Opinion for the Los Angeles Harbor  
35 Development Project (FWS File No. 1-6-92-F-25), and the Deep Draft Navigation  
36 Improvement EIS/EIR (USACE and LAHD 1992), which are incorporated by reference.  
37 The following summarizes information on California least terns in the Port.

38 The California least tern is known to nest during the summer in the Los Angeles Harbor,  
39 and LAHD started regular nest monitoring on Terminal Island in 1973 (Keane Biological  
40 Consulting 2013). In 1979, LAHD began providing nesting habitat for the species, and in  
41 1984 entered into a Memorandum of Agreement (MOA) with USFWS, the USACE, and  
42 CDFW for management of a 15-acre California least tern nesting site in the Port. The  
43 MOA allows the designated nesting site to be relocated in response to Port development  
44 activities, which has occurred several times. In 1997, LAHD prepared a new nesting site  
45 at the southern tip of Pier 400 (Keane Biological Consulting 2013), and since then all  
46 successful California least tern nesting on Terminal Island has occurred at that site.

1 California least terns are plunge divers, diving headfirst into the water to catch small fish,  
 2 including northern anchovies (*Engraulis mordax*) and topsmelt (*Atherinops affinis*).  
 3 These schooling prey species are frequently very abundant in open water, although  
 4 locations of the schools can be highly variable. Studies conducted in the Port have  
 5 demonstrated that shallow-water areas (less than six meters [20 feet] deep), especially  
 6 near the nesting site, provide important foraging habitat for the California least tern  
 7 (Keane Biological Consulting and Aspen Environmental 2004), although in 2019 the  
 8 birds fed preferentially in deep waters adjacent to the Pier 400 nesting site (Langdon  
 9 Biological Consulting 2021a). During harbor-wide least tern foraging studies in 2001,  
 10 2002, 2014, and 2019, very few foraging flights, dives, and transits were observed in  
 11 Inner Harbor areas (Keane Biological Consulting 2003; eGIS 2015; Langdon Biological  
 12 Consulting 2021a). In general, foraging is lowest at areas more distant from the nesting  
 13 site, such as the West Basin. A foraging study conducted during 2019 observed 834  
 14 foraging dives and 1574 foraging flights throughout the harbor. At the two stations  
 15 closest to the West Basin, in the Main Channel, only 6 dives and 4 flights were observed  
 16 (Langdon Biological Consulting 2021a).

17 During the year-long avian surveys conducted as part of the 2013 and 2018 biological  
 18 surveys, California least terns were observed from April through July, as is typical (MBC  
 19 2016; Wood E&IS 2021). Most birds were observed in survey zones immediately  
 20 adjacent to the Pier 400 nesting colony, or flying over the colony, and none were  
 21 observed near the Berths 121-131 Terminal. During the 2021 nesting season, California  
 22 least tern monitors recorded 162 nesting pairs (Langdon Biological Consulting 2021b).

**Table 3.3-1. Special Status Species (Designated by NOAA, USFWS, and CDFW) Observed in the Port Area**

Species	Agency/Designation	Notes
<b>Birds</b>		
Belding's Savannah Sparrow ( <i>Passerculus sandwichensis</i> )	CDFW – SE	Inhabits coastal salt marches of southern California. Not observed in biological surveys performed from 2000 to present (2018)
Black Oystercatcher ( <i>Haematopus palliatus</i> )	USFWS – BCC	Known to nest in the Port Complex. 320 individuals recorded in the Port Complex along the Middle Breakwater during the 2018 Biological Surveys.
Black Skimmer ( <i>Rhyncops niger</i> )	USFWS – BCC CDFW – SCC	Year-round species. Known to nest annually at Pier 400. 184 individuals recorded in the Port Complex during the 2018 Biological Surveys. Most observations at Cabrillo Beach.
Black-crowned Night Heron ( <i>Nycticorax nycticorax</i> )	CDFW – SA	Year-round species. No nesting was observed during the 2018 Biological Surveys, but 37 individuals sighted in the Port Complex.
Brant ( <i>Branta bernicla</i> )	CDFW – SA	Uncommon in the Port, but found regionally. No known nesting has occurred in the Port Complex. 1 individual observed during the 2018 Biological Surveys.
Brown Pelican ( <i>Pelecanus occidentalis</i> )	CDFW – FP	No known nesting site in the Port Complex. 2,780 individuals recorded in the Port Complex during the 2018 Biological Surveys. Primarily observed in Outer Harbor along breakwaters and in shallow water habitats.

**Table 3.3-1. Special Status Species (Designated by NOAA, USFWS, and CDFW) Observed in the Port Area**

Species	Agency/Designation	Notes
Burrowing Owl ( <i>Athene cunicularia</i> )	USFWS – BCC	Primarily transient. Last observed nesting in Port Complex during the 2008 Biological Surveys. Not observed during the 2018 Biological Surveys. However, they are observed transiting occasionally during their migration season.
California Gull ( <i>Larus californicus</i> )	CDFW – WL	Year-round species, nests in the Port Complex. 261 individuals recorded in the Port Complex during the 2018 Biological Surveys.
California Least Tern ( <i>Sterna antillarum browni</i> )	USFWS – FE CDFW – SE, FP	Migratory species. Designated nesting site at Pier 400. 90 individuals recorded in the Port Complex during the 2018 Biological Surveys. Foraging occurs primarily around Pier 400, the breakwater and shallow water habitats.
Caspian Tern ( <i>Hydroprogne caspia</i> )	USFWS – BCC	Migratory species. Known to nest at Pier 400 CLT nesting site. 210 individuals recorded in the Port Complex during the 2018 Biological Surveys. Most observations at Pier 300, Pier 400, and Cabrillo Beach.
Common Loon ( <i>Gavia immer</i> )	CDFW – SCC	Migratory species. Not known to nest in the Port Complex. 3 individuals observed roosting in the Port Complex during the 2018 Biological Surveys.
Double-crested Cormorant ( <i>Phalacrocorax auratus</i> )	CDFW – WL	Year-round species. Known to nest in Port Complex. 1,894 individuals recorded in the Port Complex during the 2018 Biological Surveys. Observed primarily along the Middle Breakwater.
Elegant Tern ( <i>Thalasseus elegans</i> )	CDFW – WL	Migratory species. Known to nest at the Pier 400 CLT nesting site. 5,127 individuals recorded in the Port Complex during the 2018 Biological Surveys. Observed regularly foraging at the shallow water habitat at Cabrillo Beach and Seaplane Lagoon during the 2018 Biological Surveys.
Great Blue Heron ( <i>Ardea herodias</i> )	CDFW – SA	Resident species. Known to nest in trees near POLA Main Channel and Wilmington marinas. 704 individuals recorded throughout the Port Complex during the 2018 Biological Surveys.
Great Egret ( <i>Ardea alba</i> )	CDFW – Sensitive	Resident species but rare, nests in the Port Complex. 6 individuals recorded in the Port Complex during the 2018 Biological Surveys.
Loggerhead Shrike ( <i>Lanius ludovicianus</i> )	USFWS – BCC	Migratory species. Last observed in Port Complex during the 2000 Biological Surveys. Not observed in 2018 Biological Surveys.
Long-billed Curlew ( <i>Numenius americanus</i> )	USFWS – BCC	Migratory species. Not known to nest in the Port Complex. 2 individuals recorded in the Port complex during the 2018 Biological Surveys.
Marbled Godwit ( <i>Limosa fedoa</i> )	USFWS – BCC	Migratory species. 3 individuals recorded in the Port Complex during the 2018 Biological Surveys. Observed primarily at Cabrillo Beach.

**Table 3.3-1. Special Status Species (Designated by NOAA, USFWS, and CDFW) Observed in the Port Area**

Species	Agency/Designation	Notes
Osprey ( <i>Pandion halieatus</i> )	CDFW – WL	Migratory species. Known to nest at Pier D-E in POLB. 43 observations in the Port Complex during the 2018 Biological Surveys.
Peregrine Falcon ( <i>Falco occidentalis</i> )	USFWS – BCC CDFW – FP	Resident species. Known to nest on Schuyler F. Heim Bridge and former Gerald Desmond Bridge in POLB. 1 individual recorded at Pier 400 during the 2018 Biological Surveys.
Scripps's Murrelet ( <i>Synthliboramphus scrippsi</i> )	USFWS – BCC	Ocean-dwelling species rarely observed on land. Last observed in Port Complex during 2013 Biological Surveys.
Snowy Egret ( <i>Egretta thula</i> )	CDFW – SA	Known to nest in the Port Complex in 2018. 145 individuals recorded in the Port Complex during the 2018 Biological Surveys, primarily at Cabrillo Beach.
Tufted Puffin ( <i>Fratercula cirrhata</i> )	CDFW – SSC	Last observed in the Port Complex during the 2000 Biological Surveys.
Western Snowy Plover ( <i>Charadrius nivosus nivosus</i> )	USFWS – BCC, ESA Threatened	Migratory. Not observed in biological surveys performed from 2000 to the present (2018 Biological Surveys)
Whimbrel ( <i>Numenius phaeopus</i> )	USFWS – BCC	Migratory species, nests in the Port Complex. 42 individuals recorded in the Port Complex during the 2018 Biological Surveys. Observed primarily at Cabrillo Beach.
White-faced Ibis ( <i>Plegadis chihi</i> )	CDFW – WL	Resident species. Last observed in the Port Complex during the 2000 Biological Surveys.
<b>Marine Mammals</b>		
California Sea Lion ( <i>Zalophus californianus</i> )	USFWS, NMFS – MMPA Protected	Resident species. Common. 587 individuals recorded in the Port Complex during the 2018 Biological Surveys.
Common Bottlenose Dolphin ( <i>Tursiops truncatus</i> )	USFWS, NMFS – MMPA Protected	18 individuals recorded in the Port Complex during the 2018 Biological Surveys.
Common Dolphin ( <i>Delphinus</i> spp.)	USFWS, NMFS – MMPA Protected	40 individuals recorded in the Port Complex during the 2018 Biological Surveys.
Gray Whale ( <i>Eschrichtius robustus</i> )	USFWS, NMFS – MMPA Protected	Transitory. 1 observation recorded in the Port Complex during the 2018 Biological Surveys.
Harbor Seal ( <i>Phoca vitulina</i> )	USFWS, NMFS – MMPA Protected	Resident species. Common. 223 individuals recorded in the Port Complex during the 2018 Biological Surveys.
<b>Other</b>		
Green Sea Turtle ( <i>Chelonia mydas</i> )	USFWS, NMFS – ESA Protected	Not observed in biological surveys of Port Complex performed from 2000 to present (2018). Known in region.

Notes: USFWS = United States Fish and Wildlife Service; NMFS = National Marine Fisheries Service (NOAA Fisheries); CDFW = California Department of Fish and Wildlife; CDF = California Department of Forestry and Fire Protection; MMPA = Marine Mammal Protection Act; ESA = Endangered Species Act; BCC = Bird of Conservation Concern; SA = Special Animal; SSC = Species of Special Concern; FP = Fully Protected; FE = Federally

**Table 3.3-1. Special Status Species (Designated by NOAA, USFWS, and CDFW) Observed in the Port Area**

Species	Agency/Designation	Notes
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Endangered; WL = Watch List; SE = State Endangered. Sources: USFS 2021; NOAA Fisheries 2021a, b; CDFW 2021.

1 ***Other Special-Status Bird Species***

2 Twenty-two bird species that are not listed as threatened or endangered but nevertheless  
3 have special status designated by either the CDFW (state) or USFWS (federal) have been  
4 observed in the Port Complex (Table 3.3-1). Seven of those species were observed in the  
5 West Basin during the 2013 and/or 2018 biological surveys (MBC (2016, Wood E&IS  
6 2021): California brown pelican, Caspian tern, double-crested cormorant, elegant tern,  
7 osprey, great blue heron, and peregrine falcon. Several special-status species are known  
8 to nest in the Port Complex, but nesting by those species in the West Basin area has not  
9 been observed.

10 ***Sea Turtles and Marine Mammals***

11 ***Sea Turtles:*** Several endangered or threatened sea turtle species are found in the eastern  
12 Pacific Ocean, including loggerhead sea turtles (*Caretta caretta*), green sea turtles  
13 (*Chelonia mydas*), leatherback sea turtles (*Dermochelys coriacea*), and olive ridley sea  
14 turtles (*Lepidochelys olivacea*). Although no sea turtles have been observed in the Port  
15 Complex during any of the biological surveys over the past 25 years (MEC 1988; MEC  
16 & Associates 2002; SAIC 2010; MBC 2016; Wood E&IS 2021), sporadic sightings of  
17 sea turtles in Los Angeles-Long Beach Harbor have been reported over the years (LAHD  
18 1997). Accordingly, any of these species may be rare visitors to the Port, although the  
19 likelihood of any making their way into the Inner Harbor, including the West Basin, is  
20 remote.

21 Green sea turtles, federally listed as threatened, also are found in all temperate and  
22 tropical waters throughout the world. They are rarely observed in the open ocean,  
23 primarily remaining near the coastline and around islands and inhabiting bays and  
24 protected shores, especially in areas with seagrass beds. In the eastern North Pacific,  
25 green turtles have been sighted from Baja California to southern Alaska, but most  
26 commonly occur from San Diego south (NOAA Fisheries 2021a). A small population of  
27 green sea turtles has been observed in the lower San Gabriel River, and studies are  
28 underway to determine the movements and habitat preferences of these animals (Crear et  
29 al. 2017). This species is, due to the proximity of the San Gabriel River population to the  
30 Port, the most likely to be encountered in the Port area.

31 Olive ridley sea turtles, federally listed as threatened, are found in tropical regions of the  
32 Pacific Ocean (NOAA Fisheries & USFWS 1998a). The North Pacific distinct population  
33 segment of loggerhead sea turtles is federally listed as endangered (NOAA Fisheries &  
34 USFWS 1998b), as are leatherback sea turtles (NOAA Fisheries 2012).

35 ***Marine Mammals:*** All marine mammals, which include sea otters, pinnipeds (sea lions  
36 and seals), and cetaceans (whales and dolphins), are protected under the Marine Mammal  
37 Protection Act (MMPA) of 1972; some (Table 3.3-1) are also protected by the  
38 Endangered Species Act (ESA) of 1973. Some species of marine mammals forage in the  
39 Port, but none breeds there. Of the pinnipeds, only California sea lions (*Zalophus*

1 *californianus*) and harbor seals (*Phoca vitulina*) were recorded during the biological  
2 surveys of the Port Complex (MEC & Associates 2002; SAIC 2010; MBC 2016; Wood  
3 E&IS 2021). Sea lions were observed throughout the Port, including near the Berths 121-  
4 131 Terminal, while harbor seals, which were far less abundant than sea lions, were  
5 largely limited to Outer Harbor waters and were not observed in the West Basin. Neither  
6 of these species is threatened or endangered, and there are no designated significant  
7 ecological areas for either species within the Port.

8 Outside the breakwaters, a variety of marine mammals use nearshore waters. The blue,  
9 fin, humpback, and gray whales (“baleen whales”) and sperm whales, are all listed as  
10 endangered under the ESA, although the Eastern Pacific gray whale population was  
11 delisted by NOAA in 1994. The most common whale species in the area is the gray  
12 whale (*Eschrichtius robustus*), which migrates from the Bering Sea to Mexico and back  
13 each year and generally are found as single individuals or in pods of a few individuals.  
14 Gray whales are often seen close to shore and have very occasionally been seen in the  
15 Outer Harbor, including during the 2018 Biological Surveys (Wood E&IS 2021).

16 Most of the other baleen whale species (principally blue, fin, and humpback) usually  
17 occur several miles from shore, in deeper water, and are also generally found as single  
18 individuals or in pods of a few individuals. However, the distributions of these species  
19 overlap established vessel traffic routes: Calambodikis et al. (2015) document important  
20 whale feeding areas in the Santa Barbara Channel (heavily used by coastal traffic to and  
21 from north of the Port of Los Angeles) and offshore waters between Santa Monica Bay  
22 and Long Beach (the approaches to Los Angeles Harbor).

23 Several species of dolphin and porpoises are commonly found in coastal areas near Los  
24 Angeles, including the Pacific white-sided dolphin (*Lagenorhynchus obliquidens*),  
25 Risso’s dolphin (*Grampus griseus*), Dall’s porpoise (*Phocoenoides dalli*), bottlenose  
26 dolphin (*Tursiops truncatus*), northern right-whale dolphin (*Lissodelphis borealis*), and  
27 common dolphin (*Delphinus delphis*), with the common dolphin the most abundant  
28 (Forney et al. 1995). Bottlenose and common dolphin were observed only in the open  
29 waters of the Outer Harbor during the 2013 and 2018 biological surveys (MBC 2016;  
30 Wood E&IS 2021), but the 2008 Biological Surveys observed a group of bottlenose  
31 dolphins near the San Pedro waterfront in the Main Channel (SAIC 2010). None of the  
32 biological surveys have observed cetaceans in the West Basin.

### 33 ***Vessel Collisions with Sea Turtles and Marine Mammals***

34 Ship strikes involving marine mammals and sea turtles have been documented for the  
35 following listed species in the eastern North Pacific: blue, fin, gray, humpback, and  
36 sperm whales, southern sea otter, and loggerhead, green, olive ridley, and leatherback sea  
37 turtles (NOAA Fisheries 2021a, b, NOAA Fisheries and USFWS 1998a, b, c, d; Carretta  
38 et al. 2009). As Shoeman et al. (2020) point out, large vessels (e.g., containerships) pose  
39 a higher risk of fatal results to these animals.

40 There are several sources of data on whale strikes, including data presented by NOAA  
41 Marine Sanctuaries and NMFS. NOAA Marine Sanctuaries (2021) reports that from 2007  
42 through 2020, approximately 25 whales were believed to have been struck by ships in  
43 Southern California (NOAA Marine Sanctuaries 2021). These included 11 fin whales, 6  
44 blue whales, 3 humpback whales, and 1 unidentified whale. Data supplied by NMFS  
45 (Greenman 2022) list 16 whales presumed to have been killed or injured in vessel  
46 collisions between 2011 and 2020 in Los Angeles, Ventura, and Orange county waters,  
47 including 6 fin whales, 3 gray whales, 2 blue whales, 2 humpback whales, 2 sei whales,

1 and one unidentified whale. However, the actual number of whales struck is likely to  
2 have been greater because not all strikes are reported or even detected. These incidents  
3 likely involved a variety of vessel types in addition to containerships, such as military  
4 vessels, fishing and research vessels, cargo vessels, and private pleasure vessels  
5 (Schoeman et al. 2020). Recent data suggest that increases in ship strikes are largely  
6 attributable to higher abundances of whales in nearshore waters and higher vessel speeds  
7 (Schoeman et al. 2020).

8 In Southern California, strikes involving blue whales are of particular concern, in part  
9 due to low population numbers compared to historical populations (Redfern et al. 2019)  
10 and the high risk of strikes relative to other areas (Rockwood et al. 2017). Blue whales  
11 normally pass through the Santa Barbara Channel en route from breeding grounds in  
12 Mexico to feeding grounds farther north. Their migration pattern along the California  
13 coast crosses the established shipping channels in and out of California ports, thereby  
14 increasing the opportunities for whale/vessel collisions. In the North Pacific, the pre-  
15 whaling population is estimated to have been approximately 4,900 individuals; the recent  
16 population estimate is approximately 1,500 (Carretta et al. 2021). Along the California  
17 coast, there is evidence that blue whale abundance has increased over the past three  
18 decades despite vessel strikes (Carretta et al. 2009, 2021), and Redfern et al. (2019)  
19 estimate that the blue whale population is at 97 percent of its carrying capacity,  
20 suggesting that density dependence (not ship strikes) is the primary factor affecting  
21 population size. Other potential causes of whale mortality in the region include domoic  
22 acid poisoning, mid-frequency acoustic testing, ambient noise, and infectious disease  
23 (Abramson et al. 2011).

24 Reported yearly blue whale mortalities in California attributed to ship strikes have varied  
25 widely from year to year, from 0 to 5, with an average of 0.4 per year. However, reported  
26 strikes are a minimum figure: modelling by Rockwood et al. (2017) suggests that blue  
27 whale mortality from ship strikes substantially exceeds NOAA Fisheries' recommended  
28 maximum human-caused mortality limit.

29 In addition to geographic factors, vessel speed influences whale/ship collision incidences  
30 (e.g., NOAA Marine Sanctuaries 2021; Vanderlaan and Taggart 2007; Conn and Silber  
31 2013). Jensen and Silber (2003) reported that of 134 cases of known vessel strikes in U.S.  
32 coastal waters (20 of which involved container/cargo ships/freighters) vessel speed was  
33 known for 58 cases (43.3%): most were traveling at 13 to 15 knots, but some travelled at  
34 16 to 24 knots. Vanderlaan and Taggart (2007) suggest that the risk of a lethal injury in a  
35 whale-ship collision drops substantially at vessel speeds below 12 knots, which is  
36 reinforced by Jensen and Silber (2003) who found that only 12.3% of the ship strikes they  
37 studied occurred when vessels were traveling at speeds of 10 knots or less.

38 In 2013 and in 2023, the International Maritime Organization (IMO) amended the Traffic  
39 Separation Scheme (TSS) in the Santa Barbara Channel and the approach to the Port  
40 Complex. TSS are maritime traffic management systems that regulate vessel traffic in  
41 busy waterways, thereby minimizing the risk of head-on collisions. The 2013 TSS  
42 amendments reduced the width of the separation zone from two nautical miles to one  
43 nautical mile by shifting the inbound lane shoreward, away from known whale  
44 concentrations (the outbound lane remained unchanged). Narrowing the separation zone  
45 is expected to reduce co-occurrence of ships and whales while maintaining navigational  
46 safety. The 2023 amendment extended the entire TSS westward and substantially  
47 expanded the Area To Be Avoided, in order to further protect blue, humpback, and fin  
48 whale feeding habitat. In concert with the IMO action, the USCG and USEPA issued a

1 Notice to Mariners (USCG 2023) establishing a voluntary speed reduction zone  
2 extending from Point Arguello to San Clemente, in which vessels are requested to  
3 maintain speeds of 10 knots or less.

4 Vessel collisions are considered to be a minor source of California sea lion and harbor  
5 seal deaths compared to fishery nets, shooting, and hook-and-line fisheries, and stock  
6 assessments for bottlenose and common dolphins do not list ship strikes as sources of  
7 mortality (Carretta et al. 2021). Sea turtles do suffer mortality from ship strikes, although  
8 quantitative data are sparse (Schoeman et al. 2020).

### 9 **3.3.2.3 Wildlife Movement Corridors**

10 The Conservation Element of the City of Los Angeles General Plan addresses terrestrial  
11 wildlife corridors, the purpose of which is to facilitate the movement of animals between  
12 large habitat areas. The Port does not provide any such corridors. Some marine fish  
13 species move into and out of the Port for spawning or as another part of their life cycle,  
14 and some marine mammals migrate along the coast offshore of the Port.

### 15 **3.3.2.4 Invasive Species**

16 There are at least 46 non-native aquatic species in the Los Angeles and Long Beach  
17 Harbor (Wood E&IS 2021), inhabiting both soft-bottom and hard substrate habitats. Non-  
18 native species in the Port Complex include three species of brown algae (*Sargassum*  
19 *muticum*, *S. horneri*, *Undaria pinnatifida*); four species of bryozoans, notably the warm-  
20 water species *Amathia verticillata*; two species of anemone; four species of annelid  
21 worms, including the abundant polychaete *Pseudopolydora branchiata*; seven species of  
22 molluscs, including New Zealand bubble snail (*Philine auriformis*), Japanese mussel  
23 (*Musculista senhousia*), Mediterranean mussel (*Mytilus galloprovincialis*), and Asian  
24 clam (*Theora lubrica*); 12 species of crustaceans, including the amphipods  
25 *Grandidierella japonica* and *Corophium heteroceratum*; 12 species of tunicates (notably  
26 two species of *Styela*); and two species of fish (yellowfin goby, *Acanthogobius*  
27 *flavimanus*, and larval tripletooth goby, *Tridentiger* sp.). *T. lubrica* and *P. auriformis*  
28 have been consistently widespread throughout the Port Complex, but the other species  
29 have varied in abundance and distribution over the past 20 years, some not being  
30 collected at all prior to 2013 (Wood E&IS 2021).

31 Non-native species can become invasive and compete with or prey upon indigenous  
32 species, thereby altering the local ecology. This may cause economic impacts as well.  
33 The primary sources of invasive aquatic organisms in harbors are believed to be hull  
34 fouling (organisms that grow on the exterior surfaces of ships) and the discharge of  
35 ballast water from cargo vessels (CDFW-OSPR 2024). Other potential sources include  
36 fisheries, natural dispersal, aquatic plant shipments, discarded seafood, pet releases,  
37 discarded bait, aquaculture escape, biocontrol, cargo, scientific escape, and habitat  
38 restoration (CDFW-OSPR 2024). Non-native terrestrial species have been introduced  
39 either deliberately (e.g., rock doves and ornamental plants) or by accident through being  
40 carried in cargo or possessions (e.g., rats and many non-native grasses).

41 A comparison of the three most recent harbor-wide surveys indicates that the non-native  
42 taxa collected or observed over the past 15 years have remained reasonably constant, as  
43 has the proportion of the total number of species that are non-native (Wood E&IS 2021).  
44 In the case of invertebrates (infauna, epifauna, riprap), introduced species have  
45 consistently accounted for approximately three to six percent of the total taxa, in the case

1 of fish from one to three percent, and for kelp and macroalgae, approximately ten  
2 percent.

3 One species of invasive algae has been of particular concern for Southern California in  
4 recent years. The aquarium strain of *Caulerpa* (*C. taxifolia*) has infested more than  
5 30,000 acres in the Mediterranean Sea and is listed as a federal noxious weed under the  
6 U.S. Plant Protection Act. The species is of particular concern because in areas outside its  
7 native range it can grow very rapidly, causing ecological devastation by overwhelming  
8 local seaweed species and altering fish distributions. Its rampant growth has also resulted  
9 in huge economic losses by harming tourism, pleasure boating, fishing, and the diving  
10 industry. Although this species has never been observed in the Port Complex, it is a threat  
11 in Southern California, having been found in three Southern California coastal lagoons  
12 since 2000. Its potential to create severe ecological and economic losses has prompted  
13 regulatory control measures, including the requirement to complete a *Caulerpa* survey in  
14 accordance with the *Caulerpa* Control Protocol prior to specific underwater construction  
15 activities such as bulkhead repair, dredging, and placement of navigational aids (NOAA  
16 Fisheries and CDFW 2021).

### 17 **3.3.2.5 Significant Ecological Areas**

18 The County of Los Angeles has established Significant Ecological Areas (SEAs) and  
19 Coastal Resource Areas (CRAs) to preserve a variety of biological communities for  
20 public education, research, and other non-disruptive outdoor uses. These designations  
21 limit but do not preclude development that is compatible with the biological community.  
22 Policies and regulations for SEAs and CRAs do not apply within city boundaries. There  
23 are no SEAs in the vicinity of the Project site; the closest designated CRA to the  
24 Proposed Project, and the only CRA located in the Port, is the Terminal Island Pier 400  
25 CRA, which consists of the Pier 400 California least tern nesting site, approximately four  
26 miles from the Proposed Project (County of Los Angeles 2015). There are no designated  
27 Marine Protected Areas (MPAs) within the Port.

### 28 **3.3.2.6 Area Contingency Plan**

29 An Area Contingency Plan (ACP) is a reference document prepared for the use of all  
30 agencies engaged in responding to emergencies that may have environmental  
31 consequences, such as an oil spill. Numerous agencies have a direct role in the discharge  
32 (or substantial threat of discharge) of oil in the Los Angeles-Long Beach area including  
33 the U.S. Coast Guard, CDFW, Office of Spill Prevention and Response, and local  
34 enforcement authorities (e.g., Los Angeles Port Police). The ACP applicable to the Port  
35 Complex lists four ‘environmentally sensitive sites’ within the Port Complex: Cabrillo  
36 Beach Wetlands, Los Angeles Harbor Breakwater, Middle Breakwater, and Long Beach  
37 Breakwater. All four are categorized as “extremely sensitive” (Category A), largely  
38 because of their importance as seabird and marine mammal habitat.

### 39 **3.3.2.7 Essential Fish Habitat**

40 The Proposed Project is located in an area designated as EFH for federally managed  
41 species under two Fishery Management Plans (FMPs): the Coastal Pelagics FMP and the  
42 Pacific Coast Groundfish FMP. These plans are developed and administered by Pacific  
43 Fishery Management Council (PFMC). Of the 89 managed fish species (not including  
44 Ecosystem Component Species, described below) included under these plans, 21 are

1 known to occur in the Port and could potentially be affected by the Proposed Project or  
 2 alternatives (Table 3.3-2). Most of those 21 species have been collected only sporadically  
 3 and in very low numbers in the Port; the more commonly encountered species are  
 4 considered below.

5 **Coastal Pelagics FMP:** Two coastal pelagic fish—northern anchovy (*Engraulis mordax*)  
 6 and Pacific sardine (*Sardinops sagax*)—commonly occur in the vicinity of the Proposed  
 7 Project. Northern anchovy is the most widespread and abundant fish species in the Port  
 8 Complex. In the 2018 Biological Surveys, anchovy larvae were present throughout the  
 9 Port Complex during all three seasonal sampling periods (Wood E&IS 2021). Juvenile  
 10 and adult anchovies have consistently been collected during fish sampling at stations LA5  
 11 and LA15, near the Proposed Project site (MEC and Associates 2002; SAIC 2010, MBC  
 12 2016; Wood E&IS 2021).

13 Pacific sardine is an epipelagic species (occurring in about the upper 200 meters of the  
 14 ocean) that forms loosely aggregated schools, mostly offshore (Wolf et al. 2001). Pacific  
 15 sardine larvae have been uncommon in the Port in previous surveys, in which only  
 16 occasional individuals have been collected, always in the Outer Harbor, and the same was  
 17 true for the 2018 Biological Surveys (Wood E&IS 2021). Adult and juvenile Pacific  
 18 sardines are much less common than northern anchovy in the Port, although in the past it  
 19 has been one of the ten most abundant pelagic species in the Port Complex (MEC and  
 20 Associates 2002; SAIC 2010). Fewer than 200 were collected in lampara samples in the  
 21 2013 Biological Surveys, none of them in the West Basin (MBC 2016), but night  
 22 sampling at Station LA5 in the West Basin during the 2018 Biological Surveys collected  
 23 259 individuals (Wood E&IS 2021). Accordingly, the species is considered to be  
 24 common in the Port Complex and at the Proposed Project site.

25 In past harbor-wide surveys, jack mackerel (*Trachurus symmetricus*) and Pacific  
 26 mackerel (*Scomber japonicus*) were collected much less frequently and in much lower  
 27 numbers than northern anchovy and Pacific sardine. In the 2013 and 2018 biological  
 28 surveys, however, both species were among the ten most abundant pelagic species (MBC  
 29 2016; Wood E&IS 2021), and are therefore considered common. In the 2018 Biological  
 30 Surveys, most individuals of both species were caught in the Outer Harbor, but a few  
 31 individuals of both species were captured in or near the West Basin.

**Table 3.3-2. Managed Fish Species Most Likely to Occur At or Near the Project Site in Los Angeles Harbor Based on Past Occurrences**

Common Name	Preferred Habitats	Larvae	Juvenile/Adult
<b>Coastal Pelagics</b>			
Northern anchovy	Open water.	Abundant	Abundant
Pacific sardine	Open water.	Uncommon	Common
Pacific (chub) mackerel	Open water, juveniles off sandy beaches and around kelp beds.	--	Common
Jack mackerel	Open water, young over shallow banks and around kelp beds.	Rare	Common
<b>Pacific Coast Groundfish</b>			
English sole	Soft bottom habitats.	Rare	Uncommon
Pacific sanddab	Soft bottom habitats.	Rare	Common
Butter sole	Soft bottom habitats.	Rare	Rare

**Table 3.3-2. Managed Fish Species Most Likely to Occur At or Near the Project Site in Los Angeles Harbor Based on Past Occurrences**

Common Name	Preferred Habitats	Larvae	Juvenile/Adult
Black rockfish	Along breakwaters, deep piers and pilings, kelp, eelgrass, and reefs.	--	Rare
Bocaccio	Multiple habitats, including soft and hard bottom, kelp, eelgrass.	--	Rare
Brown rockfish	Prefer hard substrata and rocky interfaces.	--	Rare
Calico rockfish	Prefer hard substrata and rocky interfaces.	--	Rare
California scorpionfish	Benthic, on soft and hard bottoms, as well as around structures.	--	Uncommon
Grass rockfish	Common on hard substrate, kelp, and eelgrass habitats.	--	Rare
Kelp rockfish	Common on hard substrate, kelp; reported along breakwater.	--	Rare
Olive rockfish	Common around hard substrate, kelp; reported along breakwater.	--	Rare
Vermilion rockfish	Juveniles over soft bottom and kelp, adults associated with hard substrate.	--	Uncommon
Lingcod	Prefer hard substrata and rocky interfaces.	--	Rare
Cabazon	Prefer hard substrata and rocky interfaces.	Rare	Rare
Pacific hake	Offshore, juveniles in open water.	Rare	Rare
Leopard shark	Multiple habitats including soft bottom, kelp, eelgrass, structures.	N/A	Rare
Spiny dogfish	Pelagic and on muddy bottoms.	N/A	Rare

Sources: MBC (2016); MEC (1988); MEC and Associates (2002); SAIC (2010); Wood E&IS 2021).

--: Not identified (most rockfish larvae are not identifiable to species). N/A = Not applicable, internal fertilization.

Note: Abundant>Common>Uncommon>Rare.

Note: Ecosystem Component Species are not included in this table.

1 In 2010, jacksmelt (*Atherinopsis californiensis*) and Pacific herring (*Clupea pallasii*)  
2 *pallasii*) were added as “Ecosystem Component Species” (ECS) to the Coastal Pelagics  
3 FMP (PFMC 2016). Ecosystem Component Species must: (1) be a non-target  
4 stock/species; (2) not be subject to overfishing, approaching overfished, or overfished  
5 and not likely to become subject to overfishing or overfished in the absence of  
6 conservation and management measures; and (3) not generally retained for sale or  
7 personal use. Amendment 15 to the Coastal Pelagics FMP prohibits the development of  
8 commercial fisheries for the additional species until and unless the PFMC has had time to  
9 study and assess the scientific information related to any proposed fishery directed at that  
10 species, and assess potential impacts of the proposed fishery on existing fisheries, fishing  
11 communities, and the marine ecosystem. The incidental catch of ECS will continue to be  
12 monitored by the PFMC.

13 The Port is near the southern limit of the range of Pacific herring (Miller and Lea 1972),  
14 and the species has not been collected during harbor-wide fish studies (MEC 1988; MEC

1 and Associates 2002; SAIC 2010, MBC 2016, Wood E&IS 2021). Jacksmelt were  
2 collected in relatively small numbers in 1986–1987, 2000, and 2008, and were most  
3 abundant in shallow-water areas of the Outer Harbor (MEC 1988; MEC and Associates  
4 2002; SAIC 2010). In the 2013 Biological Surveys, jacksmelt was the fifth most  
5 abundant pelagic species in the Port Complex (MBC 2016) and was caught in modest  
6 numbers at stations LA5 and LA15, near the Proposed Project. In the 2018 Biological  
7 Surveys, however, only 130 jacksmelt were captured in the Port Complex, none of them  
8 in or near the West Basin (Wood E&IS 2021).

9 In 2016, several more species were added to the Coastal Pelagics FMP as ECS (PFMC,  
10 2016). However, the only ones that are known to occur in or near the Port Complex are  
11 topsmelt (*Atherinops affinis*) and California grunion (*Leuresthes tenuis*). Topsmelt and  
12 grunions were abundant in pelagic and shallow nearshore samples in the 2018 Biological  
13 Surveys, and a few were collected in the West Basin (Wood E&IS 2021).

14 **Pacific Coast Groundfish FMP:** None of the species covered under the Pacific Coast  
15 Groundfish FMP (PFMC 2020) is considered abundant in the area of the Proposed  
16 Project, and only a few have been collected at the West Basin sampling stations during  
17 the harbor-wide biological surveys. Accordingly, all of the Pacific Coast Groundfish  
18 species are considered rare or uncommon in the area of the Proposed Project.

19 Pacific sanddab (*Citharichthys sordidus*) can be considered common in the Port Complex  
20 as a whole because it was collected by trawl in three previous harbor-wide biological  
21 surveys, although not in great numbers and not in the area of the Proposed Project (MEC  
22 1988; MEC and Associates 2002; SAIC 2010); the species was not collected at all in the  
23 2013 Biological Surveys (MBC 2016) and only one individual was collected in the 2018  
24 Biological Surveys (Wood E&IS 2021).

25 English sole (*Parophrys vetulus*) has been collected during all five of the cited harbor-  
26 wide studies, but in low numbers: 1 individual in 1986, 3 in 2000, 24 in 2008, 2 in 2013  
27 and 1 in 2018. Larvae of English sole were collected in 2008, probably not in 2013  
28 (unidentified Paralichthyidae larvae were collected but could not be identified to genus or  
29 species), and not in 2018.

30 California scorpionfish (*Scorpaena guttata*) is another managed species collected in all  
31 five harbor-wide surveys, including 11 individuals in 2008, 29 in 2013, and 50 in 2018;  
32 three of the individuals in the 2013 Biological Surveys were caught at Station LA5, near  
33 the Project site.

34 Vermilion rockfish (*Sebastes miniatus*) was collected during the 2000 (4 individuals),  
35 2008 (20 individuals), 2013 (45 individuals), and 2018 (11 individuals) biological  
36 surveys; four of the individuals in 2013 were caught at stations LA5 and LA15. Although  
37 adult vermilion rockfish occur between 20 and 1,440 feet, they are most common  
38 between 165 and 495 feet, meaning that the Port is at the very shallow end of their depth  
39 preference. Juveniles are common in shallower water (20 to 120 feet), where they hover  
40 over sand patches near algae or structures, including pier pilings (Love et al. 2002).

41 One gopher rockfish (*Sebastes carnatus*) and one brown rockfish (*S. auriculatus*) were  
42 captured in the 2018 Biological Surveys, neither near the Project site. These species have  
43 been collected in previous harbor-wide surveys, but never more than a few individuals.

44 Two Pacific Groundfish Ecosystem Component Species, California skate (*Raja inornata*)  
45 and big skate (*R. binoculata*), have been collected by trawl during harbor-wide biological  
46 surveys. In 2008, only 23 California skate were collected, in 2013 62 individuals were  
47 collected, seven of them in the vicinity of the Proposed Project, and in 2018 six

1 individuals, none of them in the vicinity of the Proposed Project. No big skate were  
2 collected in the studies since the 2000 studies. Both species prefer soft-bottom habitat,  
3 although California skate prefers much deeper water (60 to 2,200 feet) than big skate (10  
4 to 360 feet) (Miller and Lea 1972).

5 The remaining species in Table 3.3-2 have only been collected sporadically in the Port  
6 Complex, generally as a single fish or a few individuals.

### 7 **3.3.2.8 Special Habitats**

#### 8 **Wetlands**

9 Wetlands are considered “special aquatic sites” under the Clean Water Act (CWA) (40  
10 CFR 230.41), and impacts on wetlands are regulated by USACE. The definition of  
11 wetlands varies among state and federal agencies, but USACE uses a three-parameter  
12 method that includes assessing vegetation, hydrology, and soils (Environmental  
13 Laboratory 1987). Wetlands commonly present in estuarine or marine habitats are salt  
14 marshes dominated by pickleweed (*Salicornia virginica*) and other salt-tolerant plant  
15 species.

16 No wetlands under state or USACE jurisdiction are present at or near the Project site. The  
17 closest wetland is the Anchorage Road Wetlands, which is a small wetland that was  
18 contoured and enhanced in 2010 with pickleweed and other native plant species to  
19 mitigate for the loss of pickleweed habitat in the Northwest Slip (Weston Solutions  
20 2013). This site is about 1.6 miles from the Berths 121-131 Terminal.

#### 21 **Eelgrass Beds**

22 Eelgrass beds are also considered “special aquatic sites” under the CWA (40 CFR  
23 230.43). Eelgrass is a rooted aquatic plant that inhabits shallow soft-bottom habitats in  
24 quiet waters of bays and estuaries, as well as sheltered coastal areas (Dawson and Foster  
25 1982). Eelgrass can form dense beds that provide substrate, food, habitat, and nursery  
26 grounds for a variety of marine organisms.

27 Eelgrass has been mapped in the Port Complex during all of the harbor-wide biological  
28 surveys (MEC and Associates 2002; SAIC 2010; MBC 2016; Wood E&IS 2021). The  
29 2018 harbor-wide surveys (Wood E&IS 2021) documented a maximum of 86 acres of  
30 eelgrass (*Zostera marina*), over 95% of it in extensive beds along Inner Cabrillo Beach  
31 (about two miles from the Project site) and in the Pier 300 Shallow Water  
32 Habitat/Seaplane Lagoon area (about 1.5 miles from the Project site). No eelgrass has  
33 been documented at the Project site; the closest eelgrass is located in small patches along  
34 Berths 170-174 and in Slip 1, approximately one-half mile east of the Project site. Most  
35 of the eelgrass in the Port occurs in water depths of less than 10 feet, and the 2018  
36 surveys found none in water deeper than 25 feet, and water depths at the Project site  
37 (approximately 45 feet at the wharf face) are likely too great to support it, as insufficient  
38 light penetrates.

#### 39 **Shallow Water**

40 Shallow-water areas (less than 20 feet deep) in the Port Complex provide nursery habitat  
41 for fish and foraging habitat for fish-eating birds. Two created shallow-water areas are  
42 located in Los Angeles Harbor: the Cabrillo Shallow Water Habitat inside the San Pedro  
43 Breakwater is approximately three miles from the Berths 121-131 Terminal, and the Pier

1 300 Shallow Water Habitat/Seaplane Lagoon area is approximately 1.5 miles from the  
2 Berths 121-131 Terminal.

### 3 **Kelp Beds**

4 Kelp canopy is considered a Habitat Area of Particular Concern (HAPC) in the Pacific  
5 Coast Groundfish FMP. Kelp beds provide nursery areas for many species of fish, and act  
6 as feeding areas for fish and seabirds. In Southern California, the primary canopy-  
7 forming kelp species is giant kelp (*Macrocystis pyrifera*), which can form dense beds in  
8 shallow areas with rocky or hard substrate bottoms. Beds of giant kelp have been mapped  
9 in all four harbor-wide studies. They occur exclusively in the Outer Harbor, where water  
10 circulation is favorable to the growth of the species, and are concentrated along the outer  
11 breakwaters and on riprap and rock dikes protecting Outer Harbor channels, piers, and  
12 submerged sediment storage sites (MEC and Associates 2002; SAIC 2010; MBC 2016;  
13 Wood E&IS 2021). The 2018 Biological Surveys mapped a maximum of 118 acres of  
14 kelp canopy in the Port Complex, which was substantially more than in 2008 and 2000,  
15 but approximately 10% less than in 2013 (Wood E&IS 2021).

16 The nearest kelp beds to the Berths 121-131 Terminal site are about two miles away, near  
17 the Main Channel entrance (adjacent to the USCG Base and Berth 72). Giant kelp is not  
18 expected to occur near the Berths 121-131 Terminal site because protected locations such  
19 as the West Basin do not experience the vigorous water circulation that kelp depends  
20 upon.

### 21 **Mudflats**

22 Mudflats are considered a “special aquatic site” under the CWA (40 CFR 230). The  
23 shoreline at and near the Project site is rock riprap and no mudflats are present. The  
24 nearest known mud flats are located at Berth 78 along the west side of Main Channel  
25 (approximately 1.4 miles from the Project site) and at the Salinas de San Pedro Salt  
26 Marsh (approximately 2.6 miles from the Project site).

## 27 **3.3.3 Applicable Regulations**

### 28 **3.3.3.1 Ballast Water Discharge and Biofouling** 29 **Regulations**

30 At the federal level, the United States Coast Guard (USCG)’s Ballast Water Management  
31 Program (33 CFR 151 Part D) and the United States Environmental Protection Agency  
32 (USEPA)’s Vessel General Permit (VGP) regulate ballast water discharges. The VGP  
33 requires vessels subject to its provisions to comply with the USCG program. The Vessel  
34 Incidental Discharge Act (VIDA), passed by Congress in December 2018, authorizes  
35 EPA to establish technology-based performance standards for ballast water treatment  
36 systems and USCG to begin enforcing those standards. VIDA specifically pre-empts state  
37 programs and allows USCG to establish a phased schedule to meet performance  
38 standards. The USCG program requires that vessels engaged in international trade  
39 operating in U.S. waters do one of the following: have an on-board ballast water  
40 management system, refrain from discharging ballast water, use potable water for ballast,  
41 discharge ballast water to a shore side treatment facility, or conduct offshore ballast water  
42 exchange (this last option is available only until the performance standard compliance

1 schedule is phased in, generally at each ship's next major dry docking). Ballast water  
2 treatment systems (BWTs) must be approved by USCG.

3 California State Lands Commission (CSLC) administers the State Marine Invasive  
4 Species Program in collaboration with the CDFW Office of Spill Prevention and  
5 Response (OSPR) and the State Water Resources Control Board. Regulations  
6 establish procedures, performance standards and reporting requirements for ballast  
7 water and biofouling management (2 CCR 2270 - 2298). California state law  
8 requires ballast water and biofouling management for ships that arrive at  
9 California ports unless safety is threatened. A Ballast Water Management Report  
10 must be submitted in advance of each arrival at a California port. If a voyage is  
11 greater than 24 hours, the Ballast Water Management Report must be submitted  
12 24 hours in advance of arrival. If the voyage is less than 24 hours, the Ballast  
13 Water Management Report must be submitted prior to departing the port.  
14 Additionally, the Marine Invasive Species Program Annual Vessel Reporting  
15 Form must be submitted to the CSLC at least 24 hours in advance of the first  
16 arrival of each calendar year. A Ballast Water Management Plan and Ballast  
17 Water Logbook must be maintained on board the vessel and made available for  
18 inspection.

19 To conform with VIDA, the State Legislature recently amended California's  
20 ballast water management requirements, effective on 1 January 2022. The  
21 legislation includes the following main changes:

- 22 • Incorporates the federal ballast water discharge standards set forth in section  
23 151.2030(a) of Title 33 of the Code of Federal Regulations (CFR), and the  
24 corresponding implementation schedule outlined in 33 CFR 151.2035(b), into  
25 California law;
- 26 • Delays the compliance dates for the more stringent interim and final California  
27 ballast water discharge performance standards to 2030 and 2040, respectively,  
28 due to a lack of available ballast water treatment technologies to enable vessels to  
29 meet the California standards at this time;
- 30 • Establishes operational monitoring and recordkeeping requirements for vessels  
31 that use a ballast water treatment system to meet ballast water discharge  
32 performance standards; and
- 33 • Authorizes CSLC staff to collect ballast water and sediment samples for research  
34 purposes in addition to compliance assessment.

### 35 **California Biofouling Regulations**

36 Vessels that are newly delivered or have a regularly scheduled out-of-water maintenance  
37 on or after January 1, 2018, must maintain a Biofouling Management Plan and  
38 Biofouling Record Book, and manage biofouling on wetted surfaces and niche areas.  
39 These requirements are enforced by the CSLC.

#### 40 **3.3.3.2 Clean Water Act**

41 The CWA (33 USC 1251 et seq.) provides for the restoration and maintenance of the  
42 physical, chemical, and biological integrity of waters of the United States. Specifically,  
43 Section 401, Section 402, and Section 404 may be applicable to various elements of the  
44 Proposed Project.

1 Through the authority of the State Water Resources Control Board (SWRCB), the state  
2 administers requirements and permitting under Sections 401 and 402 of the CWA  
3 through agreement with the U.S. Environmental Protection Agency (EPA). As the  
4 Proposed Project would result in the discharge of dredge or fill material into waters of the  
5 United States, a Section 401 water quality certification or waiver from the Regional  
6 Water Quality Control Board (RWQCB) is necessary for issuance of a Section 404  
7 permit. Section 402 of the CWA created the National Pollutant Discharge Elimination  
8 System (NPDES) to enforce effluent limitations. The NPDES program prohibits the  
9 point-source discharge of pollutants unless an NPDES discharge permit has been  
10 obtained. The ultimate goal of the NPDES program is the complete elimination of all  
11 non-stormwater discharges. The NPDES program was expanded in 1987 to regulate non-  
12 point source stormwater discharges (runoff) originating from municipal and industrial  
13 sources. Compliance with the Section 402 NPDES General Construction Permit for  
14 Storm Water Discharges Associated with Construction Activity (including the  
15 development of a Storm Water Pollution Prevention Plan [SWPPP]) issued by the  
16 SWRCB) for projects that will disturb one or more acres may also be required for the  
17 Proposed Project. These regulations are discussed in greater detail in Section 3.11, Water  
18 Quality, Sediments, and Oceanography.

### 19 **3.3.3.3 Rivers and Harbors Appropriations Act of 1899**

20 Section 10 of the Rivers and Harbors Appropriations Act (33 USC 401 et seq.) regulates  
21 work, including dredging, and structures (e.g., wharves, cranes, piles) in, over, and under  
22 navigable waters of the United States. The USACE issues permits under Section 10 for  
23 work and structures.

### 24 **3.3.3.4 Federal Endangered Species Act**

25 The ESA (16 USC 1531 et seq.) protects threatened and endangered species, as well as  
26 the ecosystems upon which they depend. Section 9 prohibits such take of listed species,  
27 and defines “take” as to harm, harass, pursue, hunt, shoot, wound, kill, trap, capture, or  
28 collect, or to attempt to engage in any such conduct. Take, when incidental to otherwise  
29 lawful activities, can be authorized under Section 7 when there is a federal nexus (e.g.,  
30 federal funding, license, or authorization) and under Section 10 when there is no federal  
31 nexus. USFWS and NOAA Fisheries share responsibilities for administering the ESA.  
32 Whenever actions authorized, funded, or carried out by federal agencies could adversely  
33 affect listed species or designated critical habitat, the federal lead agency must consult  
34 with USFWS and/or NOAA Fisheries under Section 7.

### 35 **3.3.3.5 Magnuson-Stevens Fishery Conservation and Management 36 Act**

37 The 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation  
38 Act (16 USC 1801 et seq.) require federal agencies that fund, permit, or carry out  
39 activities that may affect EFH or federally managed species to consult with NOAA  
40 Fisheries and respond in writing to the conservation recommendations provided by  
41 NOAA Fisheries. In addition, NOAA Fisheries is required to comment on any state  
42 agency activities that would affect EFH or federally managed species.

### 43 **3.3.3.6 Migratory Bird Treaty Act**

1 The Migratory Bird Treaty Act (MBTA) (16 USC 703 et seq.), as amended, provides for  
2 the protection of migratory birds by making it illegal to possess, pursue, hunt, take, or kill  
3 any migratory bird species, unless specifically authorized by a regulation implemented by  
4 the Secretary of the Interior, such as designated seasonal hunting. The act also applies to  
5 removal of nests occupied by migratory birds during the breeding season. Under certain  
6 circumstances, a depredation permit can be issued to allow limited and specified take of  
7 migratory birds.

### 8 **3.3.3.7 California Endangered Species Act**

9 The CESA (California Fish and Game Code §2050 et seq.) provides for the protection of  
10 rare, threatened, and endangered plants and animals, as recognized by the CDFW, and  
11 prohibits the taking of such species without authorization by CDFW under the Fish and  
12 Game Code (§2081). State lead agencies must consult with CDFW during the California  
13 Environmental Quality Act (CEQA) process if state-listed threatened or endangered  
14 species are present and could be affected by a proposed project. For projects that could  
15 affect species that are both state and federally listed, such as the Proposed Project,  
16 compliance with the federal ESA will satisfy the CESA if CDFW determines that the  
17 federal incidental take authorization is consistent with the state Fish and Game Code  
18 (§2080.1).

### 19 **3.3.3.8 Marine Mammal Protection Act**

20 The MMPA (16 USC 1361 et seq.) prohibits the taking (including harassment,  
21 disturbance, capture, and death) of any marine mammals, except as set forth in the Act.  
22 All marine mammal species that may be found in the Port Complex are under the  
23 jurisdiction of NOAA Fisheries. The USACE is required to coordinate with NOAA  
24 Fisheries on potential impacts to marine mammals under the Fish and Wildlife  
25 Coordination Act (16 U.S.C. 661–666c).

### 26 **3.3.3.9 Marine Protection, Research, and Sanctuaries Act of 1972**

27 The Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA; 33 USC 1401 et  
28 seq.) regulates the transportation of dredged material for the purpose of ocean disposal,  
29 prohibits ocean disposal of certain wastes without a permit, and prohibits the disposal of  
30 certain materials entirely. Prohibited materials include those that contain radiological,  
31 chemical, or biological warfare agents, high-level radiological wastes, and industrial  
32 waste. Section 102 of the MPRSA authorizes EPA to promulgate environmental criteria  
33 for evaluation of all disposal permit actions, to retain review and approval authority over  
34 Section 103 permits issued by the USACE, and to designate ocean disposal sites for  
35 dredged material disposal. Section 103 of the MPRSA authorizes the USACE to issue  
36 permits for the transportation of dredged material for the purpose of disposal in the ocean  
37 at approved ocean disposal sites. Effects from sediment disposal at LA-2 were evaluated  
38 during the site designation process and subsequently evaluated in consideration of higher  
39 maximum annual disposal volume (USEPA and USACE, 2011). The MPRSA is applied  
40 in all U.S. ocean waters in and beyond the territorial sea (within 12 nautical miles of the  
41 nearest shoreline).

## 42 **3.3.4 Impacts and Mitigation Measures**

### 3.3.4.1 Methodology

Impacts on biota were assessed (1) by estimating the amount of habitat that would be affected, (2) by reviewing evidence from similar, past projects in the Port, (3) by reviewing biological resources that may be present or may use the area adjacent to the existing Berths 121-131 Terminal, and (4) from preparer expertise and judgment. The assessment of impacts is based on the assumption that the Proposed Project would include the following:

- A Section 401 (of the CWA) Water Quality Certification would be obtained from the Los Angeles RWQCB (LARWQCB) for construction and dredging activities. The LARWQCB would also require standard Waste Discharge Requirements (WDRs) pursuant to the California Porter-Cologne Water Quality Control Act.
- A CWA Section 404 permit would be obtained from USACE for discharge of fill associated with in-water construction activities.
- Dredged sediments would be disposed of at an approved upland location (approximately 260,000 cubic yards) and disposal at the LA-2 ocean disposal site (approximately 50,000 cubic yards) would be subject to USACE and USEPA authorization under Section 103 of the MPRSA.
- A Rivers and Harbor Act Section 10 permit would be obtained from the USACE for the proposed work (dredging, demolition, construction activities) and structures (piles, wharf, cranes) that would affect navigable capacity in the project area.
- During dredging, a water quality monitoring program would be implemented by LAHD's Construction Division in compliance with both USACE and LARWQCB permit requirements, wherein dredging impacts are measured in situ. The objective of the monitoring program would be adaptive management of the dredging operation, whereby potential exceedances of water quality objectives can be measured and dredging operations subsequently modified. If potential exceedance levels are approached, LAHD's Construction Division would immediately meet with the construction manager to discuss modifications of dredging operations to reduce turbidity to acceptable levels. This could include alteration of dredging methods, and/or implementation of additional Best Management Practices (BMPs) such as a silt curtain.
- Coverage under the NPDES General Permit for Stormwater Discharges Associated with Construction Activity (Construction General Permit) for the onshore portions of the Proposed Project (and alternatives) would be obtained by LAHD as the Legally Responsible Person that would delegate applicable responsibilities to the construction contractor.
- USACE and LARWQCB permits would include conditions requiring pre-construction *Caulerpa* and eelgrass surveys.
- Monitoring to verify that the BMPs, are implemented and kept in good working order would be conducted.
- The tenant would obtain and implement the applicable stormwater discharge permit (such as the General Industrial Activities Stormwater Permit [GIASP]). LAHD would incorporate MS4/Low Impact Development measures into the Proposed Project design for review and approval by the City of Los Angeles Department of Building and Safety. These are described in detail in Section 3.11, Water Quality, Sediments, and Oceanography.

- 1           • Spill Prevention, Control, and Countermeasure (SPCC) regulations would be  
2           implemented. The required Oil Spill Prevention, Control, and Countermeasure  
3           (SPCC) measures are in place that help ensure oil spills do not occur, but, if a  
4           spill does occur, include protocols to contain the spill and neutralize the potential  
5           harmful impacts. The SPCC would be the responsibility of the LAHD during  
6           construction, and the responsibility of the tenant during operations. An SPCC  
7           plan and an Oil Spill Contingency Plan (OSCP) would be prepared that would be  
8           reviewed and approved by the LARWQCB (for the SPCC) or the CDFW Office  
9           of Spill Prevention and Response, in consultation with other responsible  
10          agencies. The SPCC and OSCP plans would detail and implement spill  
11          prevention and control measures.
- 12          ▪ The No Federal Action Alternative would require coverage under the GCASP  
13          and the GIASP and would require that SPCC regulations be implemented.

### 14           **CEQA Baseline**

15           The CEQA Guidelines (§15125) require EIRs to include a description of the physical  
16           environmental conditions in the vicinity of a project that exist at the time of the NOP.  
17           The NOP for the Proposed Project was published in April 2014. For purposes of this  
18           Draft EIS/EIR, however, as described more fully in Section 2.7.1, the CEQA baseline  
19           consists of the 12-month calendar year prior to the recent Covid-19 pandemic (January  
20           through December 2019) in order to provide a representative characterization of the  
21           activity levels relevant to construction and operation of the Proposed Project. The CEQA  
22           baseline conditions are described in Section 2.7.1 and Table 2-1.

### 23           **NEPA Baseline**

24           For purposes of this Draft EIS/EIR, the significance of impacts under NEPA is  
25           determined by comparing the Proposed Project or other alternative to the NEPA baseline.  
26           The NEPA baseline conditions are described in Section 2.7.2 and summarized in Table 2-  
27           1. The NEPA baseline, or No Federal Action Alternative, would not include dredging or  
28           excavation, dredged material disposal, in-water pile installation, wharf demolition or  
29           construction, or crane installation, but would include backlands improvements (i.e., the  
30           WBICTF expansion, Section 2.6.1.3), because that element would not require federal  
31           permits.

### 32           **3.3.4.2 Thresholds of Significance**

33           The significance criteria are based on Appendix G of the 2025 CEQA Guidelines. The  
34           IS/NOP issued for the Proposed Project concluded that the Proposed Project and  
35           alternatives would have no impacts relative to the following CEQA criteria:

- 36           • IVc “have a substantial adverse effect on federally protected wetlands as defined  
37           by Section 404 of the Clean Water Act (including, but not limited to, marshes,  
38           vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological  
39           interruption, or other means”;
- 40           • IVe “conflict with any local policies or ordinances protecting biological  
41           resources, such as a tree preservation policy or ordinance”; and

- IVf “conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan”.

Accordingly, the IS/NOP stated that those criteria would not be considered in the Draft EIS/EIR. Impacts of the Proposed Project and alternatives on biological resources are considered to be significant if they would:

**BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service**

**BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service**

**BIO-3: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.**

### 3.3.4.3 Impact Determination

#### Proposed Project

**Impact BIO-1: Would the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

#### Construction

The Proposed Project would involve upland, in-water, and over-water construction activities not included in the NEPA and CEQA baselines. State or federally listed and other sensitive species in the Project area that could use the water surface and shoreline could be affected by temporary increases in turbidity from dredging, disposal, and in-water construction, by noise and vibration from in-water construction, and by vessel activity. These species include one endangered bird species (California least tern), one threatened bird species (western snowy plover), 14 other bird species with special status designation (see Table 3.3-1), and two MMPA-protected species (California sea lion and harbor seal).

California least terns nest on Pier 400, nearly three miles from the Project site. Given that distance, tern nesting would not be affected by construction activities. Snowy plovers have not nested in the harbor in at least 20 years, and no suitable nesting habitat is present in or near the Project site. As described below, neither species uses the West Basin as foraging habitat.

1 As described in Section 3.3.2.2, California sea lions are common in the Port, including in  
2 the vicinity of the Project site, and harbor seals occasionally can be seen resting on riprap  
3 and buoys in various locations throughout the Port, although they rarely frequent the  
4 West Basin. Sea lions could be disturbed by nearby construction activity and could be  
5 harmed by underwater noise from pile driving. Potential impacts from pile driving are  
6 considered below. With respect to general construction activity, including dredging, sea  
7 lions and seals would be expected to avoid or move away from areas of disturbance. Both  
8 species are acclimated to the active harbor environment, and both would be able to use  
9 other areas in the Port if construction activities forced them from the work area. No  
10 critical habitat for either species is present at the Project site.

11 **Turbidity:** Dredging and pile installation, with the resultant turbidity, have the potential  
12 to affect foraging by terns. However, as described in Section 3.3.2.2, least terns do not  
13 utilize the West Basin to any great extent as a foraging area: very few terns were  
14 observed in the West Basin in the 2000, 2008, or 2013 Los Angeles and Long Beach  
15 biological surveys and none in the 2018 Biological Surveys (Wood E&IS 2021).  
16 Foraging studies in 2001, 2002, 2014, and 2019 all showed that the West Basin/Main  
17 Channel area was among the least used in the Harbor (Keane Biological Consulting 2003,  
18 eGIS 2015, and Langdon Biological Consulting 2021a). Although California least terns  
19 will forage where prey are located irrespective of water depth, they prefer to forage close  
20 to their nesting sites (Keane Biological Consulting 2003, Langdon Biological Consulting  
21 2021a) and in shallow waters, such as the Pier 300 Shallow Water Habitat (Keane  
22 Biological Consulting 2003), which generally provide higher foraging value than deeper  
23 waters such as the West Basin. Furthermore, California least terns have been observed  
24 foraging in dredge plumes in Southern California, including in Los Angeles Harbor;  
25 accordingly, there is no evidence that dredging activities adversely affect least tern  
26 foraging (Keane and Smith 2016).

27 In addition, turbidity from dredging would be temporary (approximately 120 days) and  
28 limited to the construction areas, which constitute a small fraction of the open water area  
29 of the Port. Based on water quality monitoring data from other harbor dredge projects  
30 using clamshell dredge equipment (Anchor Environmental 2003), water quality effects  
31 are expected to be transitory and localized, often occurring within 300 feet of the activity  
32 (see Section 3.12, Water Quality, Sediments, and Oceanography, for a discussion of  
33 water quality impacts). Moreover, elevated levels of turbidity and total suspended solids  
34 that would have serious adverse effects on aquatic organisms are usually not observed in  
35 samples collected during dredging operations in Southern California (Anchor  
36 Environmental 2003). Finally, implementation of required water quality monitoring  
37 during dredging according to the requirements of the LARWQCB, as well as  
38 implementation of standard dredging BMPs via adaptive management of the dredging,  
39 would reduce turbidity.

40 Western snowy plovers, while occasional visitors to the Port, have never been observed  
41 resting or foraging in the West Basin, and no suitable nesting or foraging habitat exists  
42 there. Brown pelicans and double-crested cormorants frequent the West Basin, but they  
43 are acclimated to human activity, including construction projects, and forage widely  
44 throughout the Port Complex. Two special-status tern species, elegant and Caspian, have  
45 occasionally been observed in the West Basin; those species would experience impacts  
46 similar to those described for California least terns. The remaining special-status birds  
47 seldom or never occur in the Proposed Project area, and none are known to nest there. No  
48 critical habitat for any of the special-status bird species is present at or near the Project  
49 site.

1           **Noise and Vibration:** The Proposed Project would include the installation of up to 650  
2           24-inch concrete piles to support the new wharf and dredging to deepen the berth.  
3           Installation of the piles would be accomplished using a combination of vibratory, impact-  
4           hammer, and jetting, starting with vibratory and transitioning to impact and jetting at a  
5           certain depth. The sound volume produced during pile driving (the pile installation  
6           method that would produce the most noise) is determined by the size and type of pilings -  
7           - larger piles and steel piles generally produce higher sound volume than smaller or  
8           concrete piles -- and by method of driving, sediment conditions, bathymetry, and  
9           oceanographic conditions. The underwater noise from a working clamshell dredge has  
10          been measured as approximately 85-124 dB re 1  $\mu$ Pa (Dickerson et al., 2001).

11          Construction-related noise, including noise from pile driving, could cause California least  
12          terns and other special-status marine birds to avoid the construction area. However, as  
13          noted above, California least terns are very infrequent visitors to the West Basin.  
14          Furthermore, Keane and Smith (2016) note that available evidence indicates that  
15          dredging operations occurring more than 300 feet from a nesting site would not adversely  
16          affect least tern behavior.

17          Sound transmission in the underwater environment can be affected by local bathymetry,  
18          substrates, currents, and stratification of the water column. Underwater noise is of  
19          concern because marine mammals can be disturbed and even injured by high sound  
20          levels; studies have shown a range of behavioral modifications by whales, dolphins, and  
21          pinnipeds in response to chronic anthropogenic noise (Erbe et al. 2019) and permanent  
22          hearing impairment from both chronic and short-term noise (NOAA Fisheries 2018).  
23          Technical guidance from NOAA Fisheries (2018) establishes a disturbance threshold  
24          (Level B harassment) of 160 dBRMS (decibels Root Mean Square) for marine mammals.  
25          Exposure to sound at this level would likely cause avoidance, but not injury, for marine  
26          mammals. The current Level A harassment (injury) thresholds for impulsive sounds (e.g.,  
27          pile driving) range from 185 dB to 218 dB for seals and from 203 dB to 232 dB for sea  
28          lions (LAHD 2017b); cetaceans and sea turtles are not considered in this analysis,  
29          because as discussed in Section 3.3.2.2, none are likely to occur at or near the Project  
30          site.

31          The 24-inch concrete piles that would be installed for the new wharf would create sound  
32          levels of up to 193 dB at 10 meters from the pile being driven (Caltrans 2020; LAHD  
33          2017b). Noise levels 20 meters from the driving site would be approximately 10 dB less,  
34          which would not exceed either Level A thresholds (Caltrans 2020). Accordingly, pile  
35          installation at the Project site is anticipated to result in disturbance (Level B harassment)  
36          to marine mammals in the vicinity of construction, and could potentially result in Level A  
37          injury if animals were to get very close to the driving operation.

38          Underwater noise from pile driving and other in-water construction could affect managed  
39          fish species in the Coastal Pelagics and Pacific Groundfish FMPs and the fish that are  
40          prey for managed species. Acoustic impacts may include avoidance of the area, injury, or  
41          death; smaller fish are more susceptible to acoustic injury. Scientific investigations on the  
42          effect of noise on fish indicate that sound levels below 183 to 187 dB do not appear to  
43          result in any acute physical damage or mortality to fish (ICF and Illingworth & Rodkin,  
44          2009), and a consortium of federal and state wildlife agencies and highway authorities  
45          has established an “interim injury criterion” for fish of 206 dB<sub>peak</sub> (Caltrans 2020). The  
46          most common behavioral changes include temporary dispersal of fish schools. Since in-  
47          water construction activities would not generate peak noise levels of 206 dB or more,  
48          managed fish species would not experience injury or loss of individuals. Furthermore, the

1 small size of the area that would be affected in relation to the total harbor habitat utilized  
2 by managed species, particularly fish in the Coastal Pelagics FMP, means that the  
3 number of individuals of managed species that could be affected would be small relative  
4 to the populations in the Port.

5 Construction-related noise, including noise from pile driving, could cause special-status  
6 marine birds to avoid the construction area. However, as noted above, such species are  
7 very infrequent visitors to the Project area.

8 **Vessel Activity:** Oceangoing vessels bringing the new container cranes to the Berths  
9 121-131 Terminal represent a potential source of collisions with marine mammals,  
10 specifically pinnipeds and cetaceans. However, because of the low probability of a  
11 collision on any given vessel transit and the fact that fewer than ten vessels would be  
12 needed to convey the cranes, the likelihood of such a collision is remote. Tugboat-barge  
13 combinations conveying dredge material to the LA-2 ODMDS would transit the harbor  
14 and near-shore waters and could therefore encounter marine mammals. However, the  
15 vessels would move too slowly to represent a substantial risk of collision with marine  
16 mammals.

17 **Light:** Shade from construction vessels and lights to support construction activities at  
18 night would have temporary influences on the distribution of water column species.  
19 Certain zooplankton, fish, and squid are attracted to light, which could in turn attract  
20 sensitive species such as marine mammals; birds are not nocturnal and would not be  
21 influenced by construction lighting. Daytime shading from construction vessels or  
22 localized turbidity would not be substantially different than under baseline conditions,  
23 which include container vessel and tugboat activity at berth. Certain fish species are  
24 attracted to shade and cover that construction vessels provide, while vibration and  
25 activity may flush certain species from the area. However, because construction activities  
26 and locations would be constantly changing, the effects would be similar to those that  
27 occur under normal Port operations, with vessels coming and going and night lighting  
28 provided for Port operations. Therefore, no substantial adverse effects on sensitive  
29 species would occur.

### 30 **Operation**

31 Operation of new and upgraded terminal facilities at the Project site would not adversely  
32 affect any of the special-status bird species listed in Table 3.3-1. Those species that  
33 currently use the Project site for foraging or resting could continue to do so because the  
34 Proposed Project would not appreciably change the industrial activities at the Project site  
35 or cause a loss of habitat for those species. Operation of the backland facilities (e.g.,  
36 cranes, railyard, and container handling) would not change the numbers or species of  
37 common birds in the Project area or their activities. The increase in vessel traffic of three  
38 vessels annually would not result in a loss of habitat or individuals for sensitive birds that  
39 use the water surface for resting or foraging. No critical habitat for any listed or special  
40 status bird, marine mammal, or sea turtle species is present in the vicinity of the Berths  
41 121-131 Terminal; therefore, no critical habitat would be affected by operation of the  
42 Proposed Project.

43 **Vessel Operations:** Underwater sound from container vessels and the tugboats used to  
44 maneuver them to and from the Berths 121-131 Terminal would add to the existing vessel  
45 traffic noise in the Outer Harbor, Main Channel, and West Basin, thus potentially  
46 affecting marine mammals, specifically sea lions and harbor seals (cetaceans are rarely  
47 encountered inside the Port). Because the increase of three vessels calling at the Berths

1 121-131 Terminal would be small relative to the total number of vessels calling in the  
2 Port of Los Angeles (1,867 in 2019), the Proposed Project would not result in a  
3 substantial change in overall noise. Additionally, transits would be of short duration and  
4 distance, few individual animals would be affected, and those present would be expected  
5 to avoid sound levels that could cause damage to their hearing. Therefore, the increase in  
6 vessel calls would not adversely affect sensitive species in the Outer Harbor, the Main  
7 Channel, or the West Basin.

8 Vessels approaching Angel's Gate would pass through nearshore waters, and sound from  
9 their engines and drive systems could disturb marine mammals, including whales and  
10 dolphins, in the vicinity. However, few whales and dolphins would be affected because  
11 the animals are generally sparsely distributed offshore (Forney et al. 1995) and because  
12 the change in vessel activity under the Proposed Project would not substantially alter the  
13 underwater sound environment. These animals would likely move away from the sound  
14 as it increased in intensity from the approaching vessel, and exposure would be of short  
15 duration (Blackwell et al. 2004). Noise levels associated with vessel traffic, including  
16 near heavily used ferry terminals, generally range between 120 and 143 dB (WSDOT  
17 2015; ICF and Illingworth & Rodkin 2009), which is below the injury threshold of 180  
18 dB<sub>RMS</sub> for cetaceans and 190 dB<sub>RMS</sub> for pinnipeds. Accordingly, injury from vessel noise  
19 is unlikely.

20 As discussed in Section 3.3.2.2, container ships transiting the coastal waters of Southern  
21 California to and from the Berths 121-131 Terminal could potentially cause harm by  
22 colliding with endangered, threatened, or species of concern, such as marine mammals  
23 and sea turtles. However, there is a low probability of additional strikes attributable to the  
24 Proposed Project. The three additional vessel calls annually resulting from the Proposed  
25 Project, compared to the CEQA baseline, would be a minor increase in overall vessel  
26 calls to the Port, and the decrease of 52 vessel calls from the NEPA baseline would  
27 likewise be a minor (and beneficial) change relative to overall traffic. The IMO's  
28 relocation of the northern Traffic Separation Scheme, in May 2023, reduces the potential  
29 for encounters with whales. Furthermore, the historically high compliance rate of  
30 containerships with the Vessel Speed Reduction Program (see Section 3.2 Air Quality)  
31 means that in the approaches to Los Angeles Harbor, where whale abundances are likely  
32 to be highest (see Section 3.2.2), vessels associated with the Proposed Project would be  
33 moving at 12 knots or less, a speed which would materially reduce the risk of collision  
34 with whales.

35 **Spills and Leaks:** Accidental spills of fuel or other vessel fluids during operation could  
36 occur as a result of a vessel collision, which could have adverse effects on special-status  
37 species through toxicity and physical coating. The likelihood of a collision resulting in a  
38 spill is considered remote because experienced Port pilots are used to navigate container  
39 vessels through the harbor, vessels are required to travel in the harbor at slow speeds, and  
40 tugs are used to guide vessels to and from the berths (see Section 3.7, Hazards and  
41 Hazardous Materials). However, if an accident were to occur that resulted in a release  
42 into harbor or ocean waters, the SPCC plan and OSCP would implement control  
43 measures that would limit the severity and consequences of the spill (see Section  
44 3.12.3.1).

45 Accidental spills of pollutants during terminal operations on land would be small because  
46 large quantities of such substances would not be used. Also, as discussed in Section 3.12,  
47 Water Quality, Hydrology, and Sediments, compliance with standard laws and  
48 requirements would ensure that terminal facilities include containment and other

1 countermeasures that would prevent upland spills from reaching navigable waters. In  
2 addition, oil spill contingency plans (see Section 3.12.3.13) are required to address spill  
3 cleanup measures after a spill has occurred. Furthermore, the site drainage system would  
4 include BMP devices to process site runoff prior to discharge to the West Basin in  
5 accordance with MS4 and LID requirements (see Section 3.12 for further information).  
6 These measures would reduce the likelihood of upland spills from terminal operations  
7 adversely affecting marine organisms.

8 **Light:** As in the case of construction, shading and night lighting during operations would  
9 be similar to baseline conditions. The size and configuration of the new wharf with  
10 respect to the pierhead line and water area would be essentially the same as the baseline  
11 condition; accordingly, the wharf structure would not increase shading; in fact, it is  
12 possible that the smaller number of piles would admit more light to the under-wharf area.

13 **Stormwater Runoff:** Runoff of pollutants to the harbor from the improved facilities on  
14 existing land could occur during dry weather and from storm events during the winter  
15 rainy season. Such runoff would have negligible effects on special-status species because  
16 water quality standards for protection of marine life would not likely be exceeded (see  
17 Section 3.12.4.3).

## 18 **CEQA Impact Determination**

19 As described above, construction of the Proposed Project is not likely to result in the loss  
20 of individuals or the reduction of existing critical habitat of a state or federally listed  
21 endangered, threatened, rare, protected, candidate, or sensitive species or a Species of  
22 Special Concern. In-water construction would cause localized turbidity that could affect  
23 birds and marine mammals. However, these impacts would be temporary and limited to  
24 the waters in the vicinity of construction activities. In addition, the small size of the  
25 Project area relative to the Port and the fact that the Project area is not heavily utilized by  
26 sensitive species reduce the likelihood and severity of potential adverse effects.  
27 Implementation of required water quality monitoring during dredging according to the  
28 requirements of the LARWQCB, and implementation of standard dredging BMPs via  
29 adaptive management of the dredging, would further reduce adverse impacts. The  
30 combination of the temporary and localized nature of construction effects, the small  
31 number of individuals of sensitive species that would be affected, and the implementation  
32 of standard construction controls would ensure that impacts related to turbidity would be  
33 less than significant.

34 Sediment management and disposal would be conducted in accordance with the  
35 conditions in the USACE and LARWQCB permits and the requirements of the LA-2 site  
36 management and monitoring plan (USEPA and USACE 2011; see Section 3.12, Water  
37 Quality, Sediments, and Oceanography, for details. These controls include pre-dredge  
38 testing, water quality monitoring, and adaptive management and use of BMPs. As a result  
39 of these controls, turbidity at disposal sites, including LA-2, would be localized and  
40 temporary, and impacts on special-status species and their habitats would be less than  
41 significant. Because sediments disposed of at inland landfills or the LA-2 disposal site  
42 would be managed at those sites in accordance with the facility permits and BMPs,  
43 impacts of disposal would be less than significant.

44 In-water construction equipment (barges, workboats, tugs, and crane delivery vessels)  
45 would cause localized noise that could affect birds, marine mammals, and sea turtles.  
46 However, these impacts would be temporary (approximately four months) and limited to  
47 the waters in the vicinity of construction activities and would not cause significant noise

1 impacts. Pile driving is anticipated to result in disturbance (Level B harassment) to  
2 marine mammals (harbor seals and sea lions) in the vicinity of piledriving operations.  
3 Although these effects would be limited to a small area in the immediate vicinity of the  
4 pile-driving activity, sound levels would exceed the regulatory thresholds, and impacts  
5 would therefore be significant.

6 Terminal activity under the Proposed Project, including increased vessel calls, would be  
7 greater than the CEQA baseline; however, operational activities would result in no loss of  
8 habitat for rare, threatened, endangered, protected, or candidate species, or species of  
9 special concern. There would be no impacts on critical habitat because no critical habitat  
10 is present in the in the vicinity of the Berths 121-131 Terminal. Increased vessel activity  
11 from the Proposed Project (i.e., three additional vessels per year) could result in a slightly  
12 increased underwater noise environment. However, impacts would be less than  
13 significant because this increase would not result in an exceedance of regulatory  
14 guidelines for underwater noise nor lead to the loss of individuals or habitat of sensitive  
15 species. The risk of spills from vessels and from landside operations would be small, and  
16 the impacts would be less than significant.

17 The increase in vessel traffic would incrementally increase the likelihood of vessel  
18 collisions with marine mammals or sea turtles, which could result in injury or mortality.  
19 This impact would be less than significant because, given the minor increase in vessel  
20 traffic in the Port (three additional vessels per year above baseline) and the low speed of  
21 most vessels in compliance with the Port's Vessel Speed Reduction program, the  
22 probability of additional vessel strikes would be very low. In addition, although not  
23 required to reduce significant impacts on biological resources, implementation of MM  
24 AQ-8 Vessel Speed Reduction Program related to air quality impacts (see Section 3.2),  
25 would likely further reduce the potential for vessel collision with marine mammals and  
26 sea turtles.

### 27 ***Mitigation Measures***

28 Impacts on marine mammals and sea turtles resulting from noise associated with pile  
29 driving would be reduced with implementation of MM BIO-1. The soft start to pile  
30 driving and the actions of the marine mammal monitor (who would also note other  
31 marine wildlife, including sea turtles) would ensure that marine mammals and sea turtles  
32 would be readily able to avoid pile driving areas, and no injury to marine mammals or sea  
33 turtles from pile driving sounds would be expected.

34 **MM BIO-1: Protect marine mammals.** Although it is expected that marine  
35 mammals will voluntarily move away from the area at the commencement of the  
36 vibratory or "soft start" of pile-driving activities, as a precautionary measure, pile-  
37 driving activities occurring as part of the pile installation will include establishment  
38 of a safety zone, by a qualified marine mammal professional, and the area  
39 surrounding the operations (including the safety zones) will be monitored for marine  
40 mammals by a qualified marine mammal observer<sup>2</sup>. The pile driving site will move  
41 with each new pile; therefore, the safety zones will move accordingly.

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<sup>2</sup> Marine mammal professional qualifications shall be identified based on criteria established by LAHD during the construction bid specification process. Upon selection as part of the construction award winning team, the qualified marine mammal professional shall develop site specific pile-driving safety zone requirements, which shall follow National Oceanic and Atmospheric Administration (NOAA) Fisheries Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal

### ***Residual Impacts***

Implementation of MM BIO-1 would substantially reduce the risk of Level B harassment of sea lions and harbor seals during construction. Accordingly, impacts would be less than significant.

### **NEPA Impact Determination**

As described above, construction of the Proposed Project is not likely to result in the loss of individuals or the reduction of existing federally listed species or designated critical habitat, or other federally protected or managed species (e.g., marine mammals, sea turtles, migratory birds, and fish). In-water construction would cause localized turbidity that could affect birds and marine mammals. However, those impacts would be temporary and limited to the vicinity of construction activities. Implementation of required water quality monitoring and standard dredging BMPs via adaptive management of the dredging would ensure that these impacts would be less than significant.

Sediment management and disposal would be conducted in accordance with the conditions in the USACE and LARWQCB permits (see Section 3.12, Water Quality, Sediments, and Oceanography, for details). These controls include pre-dredge testing, water quality monitoring, and adaptive management and use of BMPs. As a result of these controls, turbidity at disposal sites would be localized and temporary, and impacts on special-status species and their habitats would be less than significant. Because sediments disposed of at inland landfills and the LA-2 site would be managed at those sites in accordance with the facility permits and BMPs, impacts of disposal would be less than significant.

In-water construction equipment (barges, workboats, tugs, and crane delivery vessels) would cause localized noise that could affect birds and marine mammals. However, these impacts would be temporary and limited to the waters in the vicinity of construction activities and would not cause significant noise impacts. Pile driving is anticipated to result in disturbance (Level B harassment) to marine mammals (harbor seals and sea lions) in the vicinity of pile-driving operations. Impacts would be significant. driving operations. Impacts would be significant. -driving operations. Impacts would be significant.

Vessel activity under the Proposed Project would be less than the NEPA baseline at full operation in 2036 and thereafter (see Table 2-1) and increased landside activity would not affect natural habitats. Accordingly, operational activities of the Proposed Project would result in no loss of habitat for rare, threatened, endangered, protected, or candidate species, or species of special concern, and impacts would be less than significant. There would be no impacts on critical habitat because no critical habitat is present in the vicinity of the Berths 121-131 Terminal. Because vessel activity from the Proposed Project would be less than under NEPA baseline conditions, impacts related to underwater noise and collisions with marine mammals and sea turtles would be less than significant. Furthermore, although mitigation is not required to reduce significant impacts on biological resources, implementation of MM AQ-8, Vessel Speed Reduction Program,

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Hearing (NOAA 2024) in consultation with the acoustic threshold white paper prepared for this purpose by LAHD (LAHD 2017b). Final pile-driving safety zone requirements developed by the selected marine mammal professional shall be submitted to LAHD Construction and Environmental Management Divisions prior to commencement of pile-driving.

1 related to air quality (see Section 3.2), would likely further reduce the potential for vessel  
2 collision with marine mammals and sea turtles.

### 3 ***Mitigation Measures***

4 MM BIO-1 would be applied as a standard condition of approval to the Proposed Project  
5 during construction.

### 6 ***Residual Impacts***

7 Impacts would be less than significant.

## 8 **Impact BIO-2: Would the Proposed Project have a substantial** 9 **adverse effect on any riparian habitat or other sensitive natural** 10 **community identified in local or regional plans, policies, regulations** 11 **or by the California Department of Fish and Wildlife or U.S. Fish and** 12 **Wildlife Service?**

### 13 **Construction**

14 **Natural Habitat or Plant Community:** There are no riparian habitats or other sensitive  
15 natural habitats or communities identified at the Project site that would be affected by  
16 construction of the Proposed Project. The depth at Berths 121-131 (-45 feet mean lower  
17 low water [MLLW]) precludes the growth of eelgrass, and no eelgrass was seen in the  
18 West Basin during port-wide eelgrass surveys conducted during the 2000, 2008, 2013, or  
19 2018 biological surveys (MEC and Associates 2002, SAIC 2010, MBC 2016, Wood  
20 E&IS 2021). Based on water quality monitoring data summarized in Section 3.12, Water  
21 Quality, Sediments, and Oceanography, turbidity would be limited to between a few  
22 hundred feet and 1,000 feet from dredging operations. The nearest eelgrass, consisting of  
23 small patches in Slip 1, is more than 0.5 miles from the nearest (southeastern) edge of the  
24 proposed dredge and in-water construction area. Results from required water quality  
25 monitoring would also be used to document the extent of the dredge plume, and adaptive  
26 management measures (such as implementation of BMPs or compliance with permit  
27 conditions such as use of a silt curtain) would be implemented to reduce impacts from  
28 turbidity and siltation. Accordingly, there would be no adverse effects on eelgrass and  
29 associated biological communities.

30 As described in Section 3.3.2.8, the nearest beds of giant kelp to the Project site are more  
31 than two miles from the Berths 121-131 Terminal. Because the Project site is not suitable  
32 habitat for giant kelp (Wood E&IS 2021), giant kelp does not occur close enough to the  
33 Proposed Project to be affected by construction activities.

34 **Essential Fish Habitat:** Impacts on EFH during construction would be localized and  
35 temporary. They would consist of turbidity and underwater noise from dredging, dredge  
36 material disposal, pile driving, the removal and replacement of the rock dike, and wharf  
37 construction. Impacts from dredging and disposal would be temporary and localized, and  
38 minimized by pre-dredge testing, water quality monitoring, and adaptive management  
39 and use of BMPs, as discussed under Impact BIO-1.

40 Underwater noise from pile driving and other in-water construction could affect managed  
41 fish species and the fish that are prey for managed species. Acoustic impacts may include  
42 avoidance of the area, injury, or death; smaller fish are more susceptible to acoustic  
43 injury. As described under Impact BIO-1, impact driving of 24-inch-diameter concrete  
44 piles would create sound levels of up to 192 dB, but sound levels of 182 dB or greater

1 would only extend to approximately 20 meters (66 feet) from the pile driving activity  
2 (LAHD 2017b).

3 Scientific investigations on the effect of noise on fish indicate that sound levels below  
4 183 to 187 dB do not appear to result in any acute physical damage or mortality to fish  
5 (ICF and Illingworth & Rodkin 2009), and a consortium of federal and state wildlife  
6 agencies and highway authorities has established an “interim injury criterion” for fish of  
7 206 dB<sub>peak</sub> (Caltrans 2020). The most common behavioral changes include temporary  
8 dispersal of fish schools. Since in-water construction activities would not generate peak  
9 noise levels in excess of 193 dB, managed fish species would not experience injury or  
10 loss of individuals. Furthermore, the small size of the area that would be affected in  
11 relation to the total harbor habitat utilized by managed species, particularly fish in the  
12 Coastal Pelagics FMP, means that the number of individuals of managed species that  
13 could be affected would be small relative to the populations in the Port.

14 The Coastal Pelagic species, being mobile, wide-ranging, open-water animals, would  
15 likely avoid the construction area, and thus avoid harassment or injury. The limited extent  
16 of the construction area relative to the Port as a whole means that loss of foraging habitat  
17 during construction would not have a substantial adverse effect on these species.  
18 Additionally, implementation of MM BIO-1 (see Impact BIO-1, above), which would  
19 require a soft start for pile driving, would cause fish to leave the area as pile driving  
20 commenced, thereby reducing potential adverse effects on fish.

21 As described in Section 3.3.2.7, none of the species covered under the Pacific Coast  
22 Groundfish FMP are considered abundant in the Project area. However, three species  
23 (California scorpionfish, vermilion rockfish, and California skate), although uncommon,  
24 have been collected in small numbers in and near the West Basin. Pacific Coast  
25 Groundfish species, being associated with the sea bottom and its physical features, tend  
26 not to be as wide-ranging as pelagic fish. Individuals in the construction zone of the  
27 Proposed Project could experience adverse effects from pile-driving noise if they are  
28 unable to move away from the immediate area. However, the limited size of the  
29 construction area and the scarcity of individuals of managed species would limit the  
30 extent of adverse effects. In addition, the implementation of MM BIO-1, which would  
31 require a soft start for pile driving, would cause fish to leave the area as pile driving  
32 commenced, thereby reducing the potential for adverse effects on managed fish.

33 **Invasive Species:** Construction activities have the potential to redistribute non-native  
34 species locally within the Port through disturbance of the bottom sediments and removal  
35 of pilings. However, in general, existing non-native species are widely distributed in the  
36 Harbor (Wood E&IS 2021), so that redistribution from the Project site during  
37 construction, if it were to occur, would not adversely affect the natural community  
38 throughout the Harbor and elsewhere in Southern California.

39 The invasive alga *Caulerpa* is a threat in Southern California (see Section 3.3.2.5). As  
40 required by USACE and the *Caulerpa* Control Protocol (NOAA Fisheries and CDFW  
41 2021), a *Caulerpa* survey would be conducted at the Project site prior to the start of  
42 construction activities.

## 43 Operations

44 **Natural Habitat or Plant Community:** As described in Section 3.3.2, no riparian  
45 habitat, SEAs, or natural plant communities are present in the vicinity of the Project site  
46 that could be affected by operation of Proposed Project facilities. As described in Section  
47 3.3.2.8, no kelp beds or eelgrass beds are present at the Project site. Runoff from the re-

1 paved areas of the Project site would be routed to existing onsite storm drains, treated via  
2 BMP devices, and discharged to the West Basin. The runoff is not expected to affect kelp  
3 or eelgrass beds adversely due to their distance from the Project site.

4 **Essential Fish Habitat:** Operation of the Proposed Project would have minimal effects  
5 on EFH. Vessel traffic would not increase above the NEPA baseline and thus would not  
6 substantially add to the overall underwater noise level (see Impact BIO-1). The common  
7 Coastal Pelagics, such as anchovies and sardines, likely would either ignore the ships or  
8 temporarily move out of the way. Other FMP species are not abundant in the Port, and  
9 vessel noise would have only minimal effects on them. Furthermore, fish abundance has  
10 increased in the Port in recent years, including FMP species (MBC 2016, Wood E&IS  
11 2021), despite increased vessel traffic in the Port. Therefore, it is unlikely that vessel  
12 traffic associated with the Proposed Project would adversely affect FMP species or EFH  
13 for any species in the Project area. Runoff from new facilities would not substantially  
14 reduce or alter EFH in harbor waters because water quality standards for protection of  
15 marine life would not be exceeded (see Section 3.12, Water Quality, Sediments, and  
16 Oceanography).

17 **Invasive Species:** There are at least 47 non-native aquatic species in the Port Complex  
18 (Wood E&IS 2021). Many of those species are present at the Project site in the benthic  
19 infauna, piling, and riprap communities. Operation of the Proposed Project could bring  
20 additional non-native marine species to San Pedro Bay as biofouling organisms attached  
21 to hulls and fittings and in ballast water discharged into the harbor as part of vessel  
22 loading operations.

23 Vessels calling at the Berths 121-131 Terminal would be required to comply with the  
24 federal and state ballast water management plans (see Section 3.3.3.1), which would  
25 minimize the threat of introducing non-native species. Furthermore, as Table 2-1 shows,  
26 operation of the Proposed Project would not substantially increase the number of vessel  
27 calls above the CEQA baseline condition and would substantially reduce the number of  
28 vessel calls relative to the NEPA baseline condition. Accordingly, there would not be a  
29 substantial increase from the baseline condition's potential to introduce non-native  
30 species in ballast water or on vessel hulls.

### 31 **CEQA Impact Determination**

32 There are no SEAs, natural plant communities, giant kelp beds, or eelgrass beds in the  
33 vicinity of the Berths 121-131 Terminal, and construction-related turbidity and noise are  
34 expected to be transitory and localized in the West Basin. Construction effects on EFH  
35 (turbidity and noise) would be localized and temporary. Accordingly, construction  
36 impacts on designated natural habitats, plant communities, special aquatic sites, and EFH  
37 would be less than significant.

38 As described above, operational activity associated with the Proposed Project would not  
39 substantially reduce or alter designated natural habitats, plant communities, special  
40 aquatic sites, or EFH through physical disturbance, underwater noise, or the introduction  
41 of non-native species. Accordingly, impacts of operation would be less than significant.

### 42 ***Mitigation Measures***

43 No mitigation is required.

### 44 ***Residual Impacts***

45 Impacts would be less than significant.

## NEPA Impact Determination

Because there are no SEAs, natural plant communities, giant kelp beds, or eelgrass beds in the vicinity of the Berths 121-131 Terminal, construction of the Proposed Project is not expected to affect any such resources, either from runoff or from turbidity during dredging. Accordingly, construction impacts on designated natural habitats, plant communities, special aquatic sites, and EFH would be less than significant.

Operational activity under the Proposed Project that could affect sensitive natural communities (i.e., vessel activity) would be substantially lower than the NEPA baseline (156 vessel calls per year versus 208) and therefore would not increase adverse effects on those resources. Accordingly, impacts would be less than significant. Because no SEAs, natural plant communities, or eelgrass beds are present close enough to be affected by Project operations, impacts on such habitats and communities would be less than significant.

### *Mitigation Measures*

No mitigation is required.

### *Residual Impacts*

Impacts would be less than significant.

### **Impact BIO-3: Would the Proposed Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery?**

No known terrestrial wildlife migration corridors are present at the Project site. The only defined migratory species in the Port are birds. California least tern, elegant tern, and Caspian tern are migratory bird species that nest at Pier 400; construction of the Proposed Project would not interfere with migration of these species. Movement to and from foraging areas in the Port also would not be affected by Proposed Project construction. A number of other migratory birds, which are covered under the MBTA, are present at least seasonally in the Port. Construction of the Proposed Project would not block or interfere with migration or movement of any of these species because the work would be in a small portion of the harbor and the birds could easily fly around or over the work. Disruption of migratory bird nesting would not be expected because suitable nesting habitat is not present on areas of the Berths 121-131 Terminal that would be subject to construction. Landside improvements (expansion of the WBICTF railyard) would not involve construction activities or equipment that could disrupt birds flying overhead; no other natural wildlife is present on the site whose movements could be affected by construction.

Fish species present in the Port, including species managed under the Magnuson-Stevens Fishery Conservation and Management Act (see sections 3.3.2.7 and 3.3.3.8) would be subject to temporary acoustic and possibly water quality impacts during dredging and pile installation. However, because the West Basin is not part of a fish migration pathway any temporary avoidance by fish would not disrupt migration by fish species. Avoidance of the area would be temporary, lasting for a few days at a time, and the area affected would be small relative to the available habitat in the Port. There would be no physical barriers to movement, and the baseline condition for fish and wildlife access would be essentially

1 unchanged. In addition, implementation of MM BIO-1, which would control pile driving  
2 to reduce underwater noise, would reduce the potential for disruption of fish movement.

3 The Port as a whole, and specifically the location of the Proposed Project, is subject to a  
4 high degree of vessel, truck, train, and construction activity to which the common species  
5 present in the Port have become acclimated. Project-related construction activity would  
6 represent a minor incremental increase in that activity and therefore would not be  
7 expected to disrupt wildlife movements. Construction vessel traffic could interfere with  
8 whale migrations along the coast. However, the arrival of up to 10 crane delivery vessels  
9 and the movement of tug-barge disposal vessels would represent an insubstantial  
10 proportion of the total Port-related commercial traffic in the area, and the vessels would  
11 move slowly (typically 12 knots or less) because of the vessel speed restrictions in place  
12 in the Port area. Furthermore, as discussed in Section 3.3.2, whales are generally sparsely  
13 distributed offshore and rarely enter the Port Complex. Accordingly, vessels would have  
14 a low probability of encountering migrating whales, and the potential for collisions  
15 between vessels and whales would be low.

16 No permanent loss of marine habitat would occur from construction of the Proposed  
17 Project because no fill would be discharged into waters of the U.S. that would create new  
18 land or that would otherwise eliminate marine habitat functions. Reconstruction of the  
19 rock dike would destroy the existing riprap community. Replacement of the rock  
20 following shoreline reconstruction would not result in a permanent loss of marine habitat,  
21 and the rock would be recolonized with a riprap community that would closely resemble  
22 the existing community. Dredging and wharf construction would have temporary adverse  
23 effects on marine habitat within the Project area. However, marine organisms rapidly  
24 recolonize disturbed areas (MEC 1988). Accordingly, disrupted bottom sediments and  
25 riprap, as well as the new pilings, in the Project area would be recolonized by marine  
26 organisms to create habitat functions similar to baseline conditions.

## 27 **Operations**

28 As discussed above, there are no known terrestrial or marine wildlife migration corridors  
29 present at the Project site. The only known migratory species in the Port are birds, a  
30 number of species of which pass through the Port in fall and spring (Wood E&IS 2021).  
31 Operation of the Proposed Project could interfere with bird migration to the extent that  
32 the wharf cranes, which would be approximately 270 feet high, would represent an  
33 obstacle. Up to ten new, large, post-Panamax cranes would be installed at the Berths 121-  
34 131 Terminal. These cranes would be considerably larger than the baseline condition of  
35 eight smaller cranes. However, there are already numerous large cranes throughout the  
36 Port, including at the adjacent China Shipping and TraPac terminals, so that the addition  
37 of cranes at the Berths 121-131 Terminal would not substantially change the nature of the  
38 area. Because there is no evidence that bird migration is impeded by the existing cranes  
39 in the Port, there is no reason to believe that the new cranes at the Proposed Project  
40 would introduce a new obstacle to migration. The new RMG cranes at the WBICTF  
41 railyard would be of a similar height as the existing RTGs in the container yard and  
42 would thus not introduce a new barrier to wildlife movement.

43 Operation of the Proposed Project would result in three more vessels calling the Berths  
44 121-131 Terminal per year compared to CEQA baseline conditions, but 52 fewer vessels  
45 than under NEPA baseline conditions. The increased vessel traffic under CEQA could  
46 somewhat increase the risk of collisions with migrating whales, which could represent a  
47 minor disruption of the movement of migratory species. As discussed in Section 3.3.2.2  
48 and under Impact BIO-1, however, this risk would be minimized by several factors,

1 including the scarcity of whales near the Port and the slow speed of cargo vessels in  
2 accordance with the requirements of the Vessel Speed Reduction Program. The decreased  
3 vessel calls relative to the NEPA baseline means that the Proposed Project would reduce  
4 the risk of collisions with marine mammals.

### 5 **CEQA Impact Determination**

6 Because no known terrestrial wildlife migration corridors are present at the Project site,  
7 construction of the Proposed Project would not block or interfere with migration or  
8 movement of terrestrial species, and impacts would be less than significant.

9 Implementation of standard dredging BMPs via adaptive management of the dredging  
10 would reduce impacts on marine mammals and fish species of temporary turbidity during  
11 dredging and pile installation to less than significant.

12 No barriers to wildlife passage, including bird and whale migration, would result from  
13 operation of the Proposed Project. Therefore, impacts would be less than significant.

### 14 ***Mitigation Measures***

15 No mitigation measures are required.

### 16 ***Residual Impacts***

17 Impacts would be less than significant.

### 18 **NEPA Impact Determination**

19 Because no known terrestrial wildlife migration corridors are present at the Project site,  
20 construction of the Proposed Project would not block or interfere with migration or  
21 movement of terrestrial species, and impacts would be less than significant.

22 Implementation of standard dredging BMPs via adaptive management of the dredging  
23 would reduce impacts on marine mammals and fish species of temporary turbidity during  
24 dredging and pile installation to less than significant.

25 No barriers to wildlife passage, including bird and whale migration, would result from  
26 operation of the Proposed Project. Therefore, impacts would be less than significant.

### 27 ***Mitigation Measures***

28 No mitigation measures are required.

### 29 ***Residual Impacts***

30 Impacts would be less than significant.

## 31 **Alternative 1 – No Project**

32 Under Alternative 1, no further LAHD action would occur. LAHD would not implement  
33 any terminal improvements. No new cranes would be added and no dredging or backland  
34 improvements, wharf construction, or expansion of the WBICTF on-dock rail yard would  
35 occur.

36 Under the No Project Alternative, the existing Berths 121-131 Terminal would continue  
37 to operate as an approximately 186-acre container terminal. Based on the Port's  
38 throughput projections, terminal operations, including vessel calls, trucks, and train trips  
39 would grow over time as throughput demands increase. Under Alternative 1, container

1 ships that currently berth and load/unload at the terminal would continue to do so, but the  
2 number of vessel calls per year would increase from 153 under the baseline to 208 at full  
3 capacity (Table 2-2).

4 The No Project Alternative would not preclude future improvements to the Berths 121-  
5 131 Terminal. However, any future changes in use or new improvements with the  
6 potential to significantly impact the environment would need to be analyzed in a separate  
7 environmental document.

8 **Impact BIO-1: Would Alternative 1 have a substantial adverse effect,**  
9 **either directly or through habitat modifications, on any species**  
10 **identified as a candidate, sensitive, or special status species in local**  
11 **or regional plans, policies, or regulations, or by the California**  
12 **Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

13 **Construction**

14 Under Alternative 1, there would be no construction at the Berths 121-131 Terminal.  
15 Therefore, there would be no activities, including pile driving and dredging, that could  
16 cause loss of individuals or habitat of special-status species.

17 **Operation**

18 Under Alternative 1, the increased number of vessel calls at the Berths 121-131 Terminal  
19 at full operation would increase the potential for vessel strikes with protected species.  
20 Thus, increased vessel traffic under this alternative may incrementally increase the  
21 potential for whale and sea turtle strikes compared to baseline conditions. As described in  
22 Impact BIO-1 for the Proposed Project, however, the increased probability of such strikes  
23 would be low both because the increment to total vessel traffic would be small (55  
24 vessels relative to baseline portwide traffic of 1,867 vessels) and because those vessels  
25 would be moving slowly (12 knots) in the approaches to the Port.

26 Vessel traffic would increase the overall underwater sound environment in the Port  
27 because the number of vessels calling at the Berths 121-131 Terminal would increase  
28 over baseline conditions (Table 2-2). However, as with the Proposed Project (see Impact  
29 BIO-1), the increase would be small relative to total vessel traffic and would therefore  
30 not likely substantially change the underwater noise environment.

31 **CEQA Impact Determination**

32 Because there would be no construction at the Project site, no construction-related  
33 impacts would occur. Although this alternative would result in an increase of vessels  
34 during operations, impacts would be less than significant because of the low probability  
35 of whale and sea turtle strikes and the insubstantial increase in the noise environment of  
36 the Port.

37 ***Mitigation Measures***

38 No mitigation is required.

39 ***Residual Impacts***

40 Impacts would be less than significant.

## NEPA Impact Determination

Analysis of the No Project Alternative is not required under NEPA. NEPA requires the analysis of a No Federal Action Alternative (Alternative 2 in this document).

### *Mitigation Measures*

Mitigation measures are not applicable.

### *Residual Impacts*

An impact determination is not applicable.

## **Impact BIO-2: Would Alternative 1 have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

### **Construction**

Under Alternative 1, there would be no construction at the Berths 121-131 Terminal. Therefore, there would be no substantial reduction or alteration of riparian or other designated habitats, sites, plant communities, including mudflats, eelgrass, kelp beds, or EFH.

### **Operations**

Operation of the Berths 121-131 Terminal under Alternative 1 would result in up to 55 more vessel calls annually than under CEQA baseline conditions. As described in Section 3.3.2.8, there are no riparian habitats, mudflats, eelgrass, or kelp beds in the vicinity of the Berths 121-131 Terminal. Accordingly, those operations would not result in a substantial reduction or alteration of designated habitats, sites, or plant communities, and there would be no disruption of EFH because the increased vessel traffic would not occur near any such resources.

As with the Proposed Project, operation of Alternative 1 could bring non-native marine species to San Pedro Bay as biofouling organisms attached to hulls and fittings and in ballast water discharged into the harbor as part of vessel loading operations. This would represent a 3 percent increase in overall vessel traffic to the Port relative to the CEQA baseline. The vessels would be required to comply with federal and state ballast water management programs (see Section 3.3.3.1), which would reduce the potential for introduction of non-native species via ballast water. Despite those controls, however, the substantial increase in vessel traffic means there is a potential for non-native species to arrive via ballast water or hull fouling and fittings. There are at present no available control methods that would further reduce those risks. Accordingly, invasive species introductions could occur, and their effects on the marine communities in the Port could be serious.

### **CEQA Impact Determination**

Because there would be no construction at the Berths 121-131 Terminal, no construction-related impacts would occur. Because operations would not result in a substantial

1 reduction or alteration of any riparian habitat or other sensitive natural community,  
2 impacts on such habitats would be less than significant.

3 Because operation of Alternative 1 would increase the possibility of introducing non-  
4 native species into the Port via ballast water and hull fouling, impacts would be  
5 significant.

### 6 ***Mitigation Measures***

7 No mitigation is required for impacts related to riparian habitats, mudflats, eelgrass, or  
8 kelp beds.

9 Although existing regulations reduce the potential for the introduction of non-native  
10 species via vessel activity, they do not eliminate it. Due to the lack of a proven  
11 technology for eliminating the introduction of non-native species, no feasible mitigation  
12 is available to prevent introduction of invasive species via vessel hulls or ballast water.  
13 New technologies are being explored, and, if methods become available in the future,  
14 they would be implemented as required at that time.

### 15 ***Residual Impacts***

16 Impacts would be significant and unavoidable.

## 17 **NEPA Impact Determination**

18 Analysis of the No Project Alternative is not required under NEPA. NEPA requires the  
19 analysis of a No Federal Action Alternative (Alternative 2 in this document).

### 20 ***Mitigation Measures***

21 Mitigation measures are not applicable.

### 22 ***Residual Impacts***

23 An impact determination is not applicable.

## 24 **Impact BIO-3: Would Alternative 1 interfere substantially with the** 25 **movement of any native resident or migratory fish or wildlife species** 26 **or with established native resident or migratory wildlife corridors, or** 27 **impede the use of native wildlife nursery?**

### 28 **Construction**

29 Under Alternative 1, there would be no construction at the Berths 121-131 Terminal.  
30 Therefore, there would be no interference with wildlife movement or migration corridors.

### 31 **Operations**

32 Operation of Alternative 1, would result in an increase of up to 55 annual vessel calls  
33 relative to the CEQA baseline. There are no wildlife migration corridors or nursery areas  
34 at or near the Project site. Accordingly, operation of Alternative 1 would not interfere  
35 with movement or migration of wildlife. Migration by bird species that visit or pass  
36 through the area would not be affected by any changes in terminal operations because no  
37 new structures would be present that could impede their movement.

1 The increased vessel traffic could somewhat increase the risk of collisions with migrating  
2 whales, which could represent a minor disruption of the movement of migratory species.  
3 As discussed in Section 3.3.2.2 and under Impact BIO-1, however, this risk would be  
4 minimized by several factors, including the scarcity of whales near the Port and the slow  
5 speed of cargo vessels in accordance with the requirements of the Vessel Speed  
6 Reduction Program.

### 7 **CEQA Impact Determination**

8 Because Alternative 1 would have no adverse effects on wildlife migration or movement,  
9 impacts would be less than significant.

#### 10 ***Mitigation Measures***

11 No mitigation is required.

#### 12 ***Residual Impacts***

13 Impacts would be less than significant.

### 14 **NEPA Impact Determination**

15 Analysis of the No Project Alternative is not required under NEPA. NEPA requires the  
16 analysis of a No Federal Action Alternative (Alternative 2 in this document).

#### 17 ***Mitigation Measures***

18 Mitigation measures are not applicable.

#### 19 ***Residual Impacts***

20 An impact determination is not applicable.

## 21 **Alternative 2 – No Federal Action**

22 Alternative 2 is a NEPA-required alternative for purposes of this Draft EIS/EIR. This  
23 alternative consists of the activities that would occur absent a USACE permit, which  
24 would normally be restricted to the backland elements of the Proposed Project,  
25 specifically the expansion of the WBICTF intermodal railyard reconfiguration. Those  
26 activities would require only state and local permits. In-water elements such as dredging,  
27 dredged material disposal, and wharf construction would not occur. Alternative 2  
28 corresponds to the NEPA baseline.

29 The CEQA analysis of the No Federal Action Alternative analyzes the impacts of the  
30 project elements that would be constructed and operated without a federal permit (in this  
31 case, the railyard expansion), which would increase train activity. It also considers the  
32 impacts of the increases in other activity levels over the CEQA baseline, which are  
33 similar to the No Project Alternative (Alternative 1), i.e., additional vessel calls as  
34 throughput at the Berths 121-131 Terminal increases up to the terminal's capacity.

35 **Impact BIO-1: Would Alternative 2 have a substantial adverse effect,**  
36 **either directly or through habitat modifications, on any species**  
37 **identified as a candidate, sensitive, or special status species in local**

1 **or regional plans, policies, or regulations, or by the California**  
2 **Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

3 **Construction**

4 Under Alternative 2, there would be no in-water construction at the Berths 121-131  
5 Terminal. Construction of the WBICTF railyard expansion would occur entirely in a  
6 paved area. RMG cranes would likely be delivered by up to seven oceangoing vessels.  
7 That number of vessels would not be sufficient to have a substantial adverse effect on  
8 special status species.

9 **Operation**

10 Under Alternative 2 the number of vessel calls would increase relative to the CEQA  
11 baseline but there would be no increase in the number of vessel calls and other water-  
12 related operational activities relative to the NEPA baseline (Table 2-1). Accordingly, the  
13 risk of vessel strikes on marine mammals and sea turtles and the underwater noise  
14 environment would both increase relative to the CEQA baseline. However, under NEPA  
15 there would be no increase in adverse effects on marine special-status species.

16 Operation of the railyard would not cause loss of individuals or habitat of special-status  
17 species because no such resources are or would be present at the site. No federally listed  
18 habitat would be lost because no such habitat is present that could be affected by  
19 operation of the railyard.

20 **CEQA Impact Determination**

21 Because there would be no in-water construction at the Berths 121-131 Terminal and  
22 there are no special-status species at the railyard site, no construction-related impacts on  
23 special-status species or their habitats would occur.

24 Vessel traffic under Alternative 2 would be the same as under the No Project Alternative.  
25 Accordingly, impacts related to spills from vessels and whale and sea turtle strikes would  
26 be less than significant, as described in Impact BIO-1 for the No Project Alternative.  
27 Because no special-special status species, their habitat, or federally designated critical  
28 habitat would be affected by operation of the expanded railyard, no operational impacts  
29 would occur.

30 ***Mitigation Measures***

31 No mitigation is required.

32 ***Residual Impacts***

33 Impacts would be less than significant.

34 **NEPA Impact Determination**

35 Because construction at the Project site would occur entirely in paved areas that have no  
36 special status species or habitats, no construction-related impacts would occur. As there  
37 would be no increase in activity during operations relative to the NEPA baseline, no  
38 operational impacts would occur.

39 ***Mitigation Measures***

40 No mitigation is required.

1                    ***Residual Impacts***

2                    No impacts would occur.

3                    **Impact BIO-2: Would Alternative 2 have a substantial adverse effect**  
4                    **on any riparian habitat or other sensitive natural community**  
5                    **identified in local or regional plans, policies, regulations or by the**  
6                    **California Department of Fish and Wildlife or U.S. Fish and Wildlife**  
7                    **Service?**

8                    **Construction**

9                    Under Alternative 2, the only construction at the Berths 121-131 Terminal would involve  
10                    expansion of the railyard. As there are no state, federally, or locally designated natural  
11                    habitat, special aquatic site, or plant communities at the site, this alternative would not  
12                    result in the loss of habitat from construction activities.

13                    **Operations**

14                    Operation of Alternative 2 would result in an increase of up to 55 vessel calls per year  
15                    relative to the CEQA baseline but no increase in the number of vessel calls and other  
16                    operational activities relative to the NEPA baseline. The increase in vessel traffic would  
17                    be small relative to total vessel traffic in the Port and would not result in a substantial  
18                    reduction or alteration of a special habitat, site, or community. As described for  
19                    Alternative 1, vessel operations involve the potential for the introduction of non-native  
20                    species, which could have adverse effects on natural communities in the harbor.

21                    Although truck and train trips would increase relative to the CEQA baseline, those  
22                    activities would have no effects on sensitive natural communities, including EFH.

23                    **CEQA Impact Determination**

24                    Because construction at the Berths 121-131 Terminal would only involve paved areas, no  
25                    construction-related impacts on designated habitats would occur. Operation of this  
26                    alternative would result in more vessel calls than under CEQA baseline conditions, but  
27                    because those operations would not result in a substantial reduction or alteration of  
28                    special habitat, site, or community, including wetlands, kelp, and eelgrass, impacts on  
29                    those habitats from operation would be less than significant.

30                    Because operation of Alternative 2 would increase the possibility of introducing non-  
31                    native species into the Port via ballast water and hull fouling, impacts would be  
32                    significant.

33                    ***Mitigation Measures***

34                    No mitigation is required for impacts related to riparian habitats, mudflats, eelgrass, or  
35                    kelp beds.

36                    Although existing regulations reduce the potential for the introduction of non-native  
37                    species via vessel activity, they do not eliminate it. Due to the lack of proven technology  
38                    for eliminating the introduction of non-native species, no feasible mitigation is available  
39                    to prevent introduction of invasive species via vessel hulls or ballast water. New  
40                    technologies are being explored, and, if methods become available in the future, they  
41                    would be implemented as required at that time.

1                    ***Residual Impacts***

2                    Impacts would be significant and unavoidable.

3                    **NEPA Impact Determination**

4                    Because construction at the Project site would only involve paved areas, no construction-  
5                    related impacts on designated habitats would occur. As there would be no increase in  
6                    activity during operations relative to the NEPA baseline, no operational impacts would  
7                    occur.

8                    ***Mitigation Measures***

9                    No mitigation is required.

10                  ***Residual Impacts***

11                  No impacts would occur.

12                  **Impact BIO-3: Would Alternative 2 interfere substantially with the  
13                  movement of any native resident or migratory fish or wildlife species  
14                  or with established native resident or migratory wildlife corridors, or  
15                  impede the use of native wildlife nursery?**

16                  **Construction**

17                  Under Alternative 2, the only construction would be expansion of the railyard.  
18                  Construction of the expanded railyard would involve oceangoing vessels only to deliver  
19                  the RMG cranes. As the site is fully paved and an active industrial site, it is not used by  
20                  wildlife for migration or movement in the region. Therefore, construction would not  
21                  interfere with wildlife movement or migration corridors.

22                  **Operations**

23                  Operation of Alternative 2 would result in an increase of up to 55 annual vessel calls  
24                  relative to the CEQA baseline, but no increase relative to the NEPA baseline. Truck and  
25                  train traffic would also increase relative to the CEQA baseline. There are no wildlife  
26                  migration corridors or nursery areas at or near the Project site. Accordingly, operation of  
27                  Alternative 2 would not interfere with movement or migration of wildlife. Migration by  
28                  bird species that visit or pass through the area would not be affected by any changes in  
29                  terminal operations because no new structures would be present that could impede their  
30                  movement.

31                  **CEQA Impact Determination**

32                  Because Alternative 2 would have no adverse effects on wildlife migration or movement,  
33                  impacts would be less than significant.

34                  ***Mitigation Measures***

35                  No mitigation is required.

36                  ***Residual Impacts***

37                  Impacts would be less than significant.

1                   **NEPA Impact Determination**

2                   Because construction and operation of Alternative 2 would not adversely affect wildlife  
3                   migration or movement, impacts would be less than significant.

4                   ***Mitigation Measures***

5                   No mitigation is required.

6                   ***Residual Impacts***

7                   Impacts would be less than significant.

8   **3.3.4.4        Summary of Impact Determinations**

9                   Table 3.3-4 summarizes the CEQA and NEPA impact determinations of the Proposed  
10                  Project and its alternatives related to biological resources, as described in the discussions  
11                  above. This table is meant to allow easy comparison among the potential impacts of the  
12                  Proposed Project and its alternatives with respect to this resource. Identified potential  
13                  impacts may be based on federal, state, and City of Los Angeles significance criteria,  
14                  LAHD criteria, and the scientific judgment of the report preparers.

15                  For each impact threshold, the table describes the impact, notes the CEQA and NEPA  
16                  impact determinations, describes any applicable mitigation measures, and notes the  
17                  residual impacts (i.e., the impact remaining after mitigation). All impacts, whether  
18                  significant or not, are included in this table. Note that impact descriptions for each of the  
19                  alternatives are the same as for the Proposed Project, unless otherwise noted.

**Table 3.3-4. Summary Matrix of Potential Impacts and Mitigation Measures for Biological Resources Associated with the Proposed Project and Alternatives**

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Proposed Project	<b>BIO-1:</b> Would the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	CEQA: <b>Significant impact</b>	<b>MM BIO-1:</b> Avoid Marine Mammals would be applied.	Less than significant
		NEPA: <b>Significant impact</b>	<b>MM BIO-1:</b> Avoid Marine Mammals would be applied	Less than significant
	<b>BIO-2:</b> Would the Proposed Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	CEQA: Less than significant	No mitigation is required.	Less than significant
		NEPA: Less than significant	No mitigation is required.	Less than significant
	<b>BIO-3:</b> Would the Proposed Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery?	CEQA: Less than significant	No mitigation is required.	Less than significant
		NEPA: Less than significant	No mitigation is required.	Less than significant
Alternative 1 No Project	<b>BIO-1:</b> Would Alternative 1 have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or	CEQA: Less than significant	Mitigation not applicable	Less than significant
		NEPA: Not applicable	Mitigation not applicable	Not applicable

**Table 3.3-4. Summary Matrix of Potential Impacts and Mitigation Measures for Biological Resources Associated with the Proposed Project and Alternatives**

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			
	<b>BIO-2:</b> Would Alternative 1 have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	CEQA: <b>Significant impact</b>	No mitigation can be applied to the No Project Alternative.	<b>Significant and unavoidable</b>
		NEPA: Not applicable	Mitigation not applicable	Not applicable
	<b>BIO-3:</b> Would Alternative 1 interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery?	CEQA: Less than significant	Mitigation not applicable	Less than significant
		NEPA: Not applicable	Mitigation not applicable	Not applicable
Alternative 2 No Federal Action	<b>BIO-1:</b> Would Alternative 2 have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	CEQA: No impact	No mitigation is required.	No impact
		NEPA: No impact	No mitigation is required.	No impact
	<b>BIO-2:</b> Would Alternative 2 have a substantial adverse effect on any riparian habitat or other sensitive	CEQA: <b>Significant impact</b>	No feasible mitigation is available to reduce impacts from	<b>Significant and unavoidable</b>

**Table 3.3-4. Summary Matrix of Potential Impacts and Mitigation Measures for Biological Resources Associated with the Proposed Project and Alternatives**

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		operations to less than significant levels.	
		NEPA: No impact	No mitigation is required	No impact
	<b>BIO-3:</b> Would Alternative 2 interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery?	CEQA: Less than significant	No mitigation is required.	Less than significant
		NEPA: Less than significant	No mitigation is required.	Less than significant

1 **3.3.4.5 Mitigation Monitoring**

2 Mitigation measure MM BIO-1 is a standard condition of approval applicable to the  
 3 Proposed Project. Mitigation is not applicable to either of the two alternatives.

Mitigation Measure	<b>MM BIO-1: Protect marine mammals.</b> Although it is expected that marine mammals will voluntarily move away from the area at the commencement of the vibratory or “soft start” of pile-driving activities, as a precautionary measure, pile-driving activities occurring as part of the sheet pile and king pile installation will include establishment of a safety zone, by a qualified marine mammal professional, and the area surrounding the operations (including the safety zones) will be monitored for marine mammals by a qualified marine mammal observer. The pile driving site will move with each new pile; therefore, the safety zones will move accordingly.  Marine mammal professional qualifications shall be identified based on criteria established by LAHD during the construction bid specification process. Upon selection as part of the construction award winning team, the qualified marine mammal professional shall develop site specific pile-driving safety zone requirements, which shall follow NOAA Fisheries Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (NOAA 2024) in consultation with the acoustic threshold white paper prepared for this purpose by LAHD (LAHD 2017b). Final pile-driving safety zone requirements developed by the selected marine mammal professional shall be submitted to LAHD Construction and Environmental Management Divisions prior to commencement of pile driving.
Timing	During construction.
Methodology	LAHD will include MM BIO-1 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.
Responsible Parties	LAHD.
Residual Impacts	Less than significant.

4 **3.3.5 Significant Unavoidable Impacts**

5 For Alternatives 1 and 2, Impact BIO-2, the introduction of non-native species that could  
 6 substantially disrupt local biological communities, impacts would remain significant and  
 7 unavoidable because no feasible mitigation is currently available.