

Section 3.9

Marine Transportation

SECTION SUMMARY

This section describes existing marine transportation within the Port and identifies potential impacts on marine transportation, including navigation and safety, that would result from the implementation of the proposed Project or an alternative should one be adopted in lieu of the Project.

Section 3.9, Marine Transportation, provides the following:

- a description of existing levels of marine vessel traffic in the Port area;
- a description of existing navigational hazards and factors affecting vessel traffic safety in the Port, including regulations and policies;
- a discussion of the methodology used to determine whether the proposed Project or alternatives would result in an impact on marine transportation;
- an impact analysis of the proposed Project and alternatives; and
- a description of any mitigation measures proposed to reduce any potential impacts and residual impacts, as applicable.

Key Points of Section 3.9:

There are numerous existing regulations and standards that deal directly with marine vessel traffic and its management. The two primary management services are the Vessel Traffic Service (VTS) and the Los Angeles Pilot Service. VTS is jointly operated by the United States Coast Guard (USCG) and Marine Exchange of Southern California (Marine Exchange), and provides real-time ship locations from a 25-mile radius area of responsibility right to berth. VTS implements the USCG Captain of the Port's (COTP) uniform procedures, including advance notification to vessel operators, vessel traffic managers, and port pilots¹ identifying the locations of dredges, derrick barges, and any associated operational procedures or restrictions (e.g., one-way traffic), to ensure safe transit of vessels ,to and from, the proposed Project area.

The Los Angeles Pilot Service provides pilots who board arriving vessels in the vicinity of the Los Angeles Sea Buoy to guide incoming ships to dock. They also provide assistance to outbound ships. Use of a Port Pilot is required for all vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot on board. Adherence to the existing standards, including use of the Port of Los Angeles/Long Beach Harbor Safety Plan's operational procedures, and application of Port Tariffs further reduces the safety risks associated with vessel movement within the Port Complex. In addition, a communication system links USCG COTP, VTS, Los Angeles Pilot Station, Long Beach Pilot Station,

¹A local master with a small vessel who can be retained to help guide large commercial craft.

1 and Port of Long Beach Security. This system is used to exchange vessel movement information and
2 safety notices among the various organizations.

3 The existing and projected terminal throughput, vessel activity, and vessel sizes that can be
4 accommodated at the Everport Container Terminal are shown in Table 3.9-1 below along with summaries
5 of the proposed Project and alternatives.

- 6 ▪ **Proposed Project.** The proposed Project, which would accommodate 2,379,525 TEUs, would
7 result in 208 vessel calls² annually, which represents an increase of 42 ship calls per year
8 (approximately four additional ship calls per month) by 2038 as compared to the CEQA baseline
9 (166 annual ship calls or 1,240,773 TEUs), and the same annual vessel calls as the NEPA
10 baseline (208 vessel calls). The addition of 42 ship calls annually (above the CEQA baseline)
11 would represent an increase of 1.96 percent over total annual ship calls of 2,143 at the Port in
12 2013.
- 13 ▪ **Alternative 1 (No Federal Action).** Alternative 1, which would accommodate 1,818,000 TEUs,
14 would increase backlands by 23.5 acres, but would not deepen the terminal berths. This
15 alternative would result in an additional 42 annual vessel call above the 2013 CEQA baseline by
16 2038; however, the largest vessel the terminal can handle would remain unchanged at 8,000 TEU
17 vessels.
- 18 ▪ **Alternative 2 (No Project).** Alternative 2, which would accommodate 1,818,000 TEUs, would
19 not make terminal improvements, but the throughput of the terminal would increase to its existing
20 maximum capacity, and would result in 42 annual vessel calls above the CEQA baseline of 166
21 annual vessel calls (total of 208 vessel calls) by 2038. Since this alternative would not deepen the
22 existing berths, the largest vessel the terminal can handle would remain unchanged at 8,000 TEU
23 vessels.
- 24 ▪ **Alternative 3 (Reduced Project: Reduced Wharf Improvements).** Alternative 3, which would
25 accommodate 2,250,000 TEUs, would deepen Berths 226-229 and expand the backlands by 23.5
26 acres. This alternative would result in 208 vessel calls annually by 2038, which is 42 annual
27 vessel calls above the CEQA baseline of 166 annual vessel calls and the same as the NEPA
28 baseline. This alternative would be able to accommodate vessels up to 16,000 TEUs at Berths
29 226-229; however, the largest vessel that can be accommodated at Berths 230-232 would remain
30 unchanged at 8,000 TEU vessels.
- 31 ▪ **Alternative 4 (Reduced Project: No Backlands Improvements).** Alternative 4, which would
32 accommodate 2,115,133 TEUs, would deepen both operating berths at the terminal but would not
33 increase backlands, which would limit the terminals ultimate throughput capacity compared to the
34 proposed Project. Alternative 4 would result in 208 vessel calls annually by 2038, which is 42
35 annual vessel calls above the CEQA baseline of 166 annual vessel calls and the same as the
36 NEPA baseline. Alternative 4 would be able to accommodate vessels up to 16,000 TEUs at
37 Berths 226-229 and vessels up to 10,000 TEUs at Berths 230-232.
- 38 ▪ **Alternative 5 (Expanded On-Dock Railyard: Wharf and Backland Improvements with an
39 Expanded Terminal Island Container Transfer Facility).** Alternative 5, which would
40 accommodate 2,379,525 TEUs, would be the same as the proposed Project but with an extra track
41 at the Terminal Island Container Terminal Facility (TICTF). This alternative would result in 208
42 vessel calls annually by 2038, which is 42 annual vessel calls above the CEQA baseline of 166

² The terms "vessel calls" and "ship calls" are used interchangeably throughout this document.

1 annual vessel calls and the same as the NEPA baseline. Alternative 5 would be able to
 2 accommodate vessels up to 16,000 TEUs at Berths 226-229 and vessels up to 10,000 TEUs at
 3 Berths 230-232.

Table 3.9-1: Existing and Projected Terminal Throughput, Vessel Activity, and Vessel Size for the Proposed Project and Alternatives

	CEQA Baseline (January 2013 – December 2013)	Proposed Project (2038)	Alt. 1 –No Federal Action (NEPA Baseline) (2038)	Alt. 2 – No Project (2038)	Alt. 3 – Reduced Project: Reduced Wharf (2038)	Alt. 4 – Reduced Project: No Backland Improvements (2038)	Alt. 5 – Expanded TICTF (2038)
Annual Throughput (TEUs)	1,240,773	2,379,525	1,818,000	1,818,000	2,250,000	2,115,133	2,379,525
Annual Ship Calls¹	166	208	208	208	208	208	208
Peak Day Ship Calls (24-hour)	22	22	22	22	22	22	22
Peak Day Number of Transits	4	4	4	4	4	4	4
Maximum Vessel Size							
Berths 226-229	8,000	16,000	8,000	8,000	16,000	16,000	16,000
Berths 230-232	8,000	10,000	8,000	8,000	8,000	10,000	10,000

1. In order to ensure consistent or regular delivery of goods, shipping lines organize their vessel calls in strings, consisting of one vessel call per week over a year (52 weeks) for Port terminals; thus one string would be comprised of 52 vessel calls. Although the throughputs between the alternatives are different, the annual vessel calls at build-out are the same because they all comprise four strings. It should be noted that vessel sizes between the alternatives will differ, with large vessels used for higher throughput alternatives (up to the maximum vessel size that can be accommodated at the berth). Further information is contained in Section 1.2, Air Quality and Meteorology.

4
 5 Neither the proposed Project nor any of the alternatives would result in a significant impact on marine
 6 transportation under both CEQA and NEPA. Specifically, during construction and operation, the
 7 proposed Project and its alternatives would not interfere with operation of designated vessel traffic lanes,
 8 VTS system equipment, or otherwise impair the level of safety for vessels navigating the Main Channel,
 9 Harbor, or Precautionary Area.

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3.9.1 Introduction

This section describes existing marine transportation within the Port and identifies potential impacts on marine transportation, including navigation and safety, that would occur as a result of implementation of the proposed Project or alternatives.

3.9.2 Environmental Setting

The Port is located in San Pedro Bay and is protected from Pacific Ocean surge conditions by the San Pedro, Middle, and Long Beach breakwaters (see Figure 3.9-1). The openings between these breakwaters, known as Angels Gate and Queens Gate, provide entry to the Ports of Los Angeles and Long Beach (also known as the Port Complex), respectively. Vessel traffic channels have been established in the Los Angeles Harbor and numerous aids to navigation have been developed.

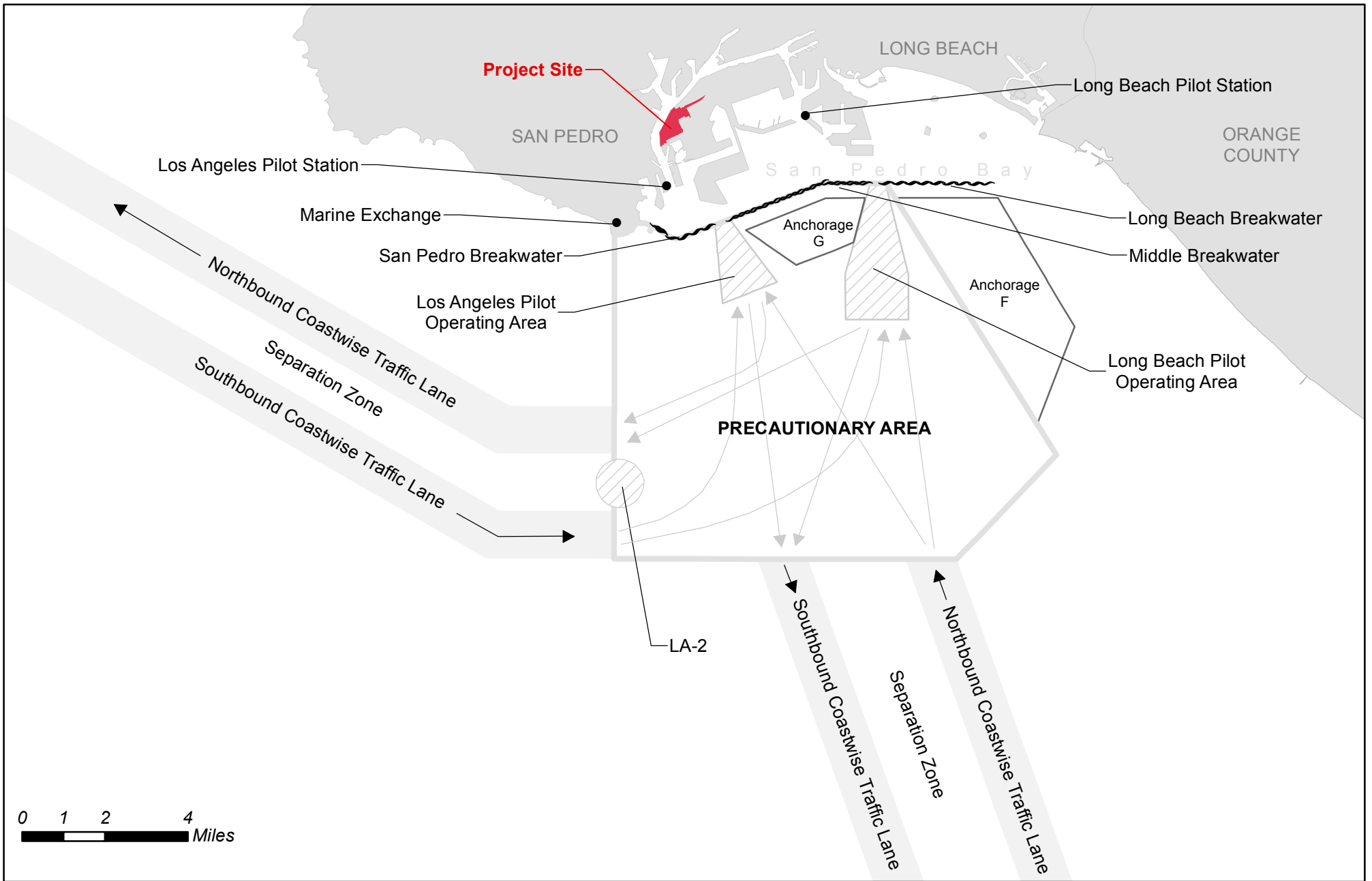
Numerous types of vessels, including fishing boats, pleasure vessels, passenger-carrying vessels, tankers, auto carriers, container vessels, dry bulk carriers and barges, all call at or reside in the Port. When approaching and leaving the harbor, commercial vessels follow vessel traffic lanes established by the USCG. Designated traffic lanes converge at the Precautionary Area (see Figure 3.9-1). The Federal Channels in the Port Complex are maintained by USACE.

3.9.2.1 Vessel Transportation Safety

Vessel traffic within and approaching the harbor is managed primarily by two entities: the VTS and the Los Angeles Pilot Service, both of which are described below in detail. Moreover, there are several measures in place to ensure the safety of vessel navigation in the harbor area. These measures and the agencies and organizations responsible for their enforcement are described below and would continue to be implemented should the proposed Project, or an alternative to the Project, be approved.

Marine Exchange of Southern California

The Marine Exchange is a voluntary, non-profit organization affiliated with the Los Angeles Chamber of Commerce. This voluntary service is designated to enhance navigation safety in the precautionary and harbor areas of the Ports of Los Angeles and Long Beach. The service consists of a coordinating office, specific reporting points, and very high frequency-frequency modulation (VHF-FM) radio communications used with participating vessels. The Marine Exchange also operates the Physical Oceanographic Real Time System (PORTS) as a service to organizations making operational decisions based on oceanographic and meteorological conditions in the vicinity of the harbor. PORTS collects and disseminates accurate real-time information on tides, visibility, winds, currents, and sea swell to maritime users to assist in the safe and efficient transit of vessels in the harbor area. The Marine Exchange also jointly operates the VTS with the USCG.



Source: NOAA's Ocean Service, Office of Coast Survey, 2015 (last accessed March 2017)



Vessel Traffic Service

VTS (operated jointly by the USCG COTP and the Marine Exchange) uses radar, radio, and visual inputs to collect real-time vessel traffic information, and broadcasts traffic advisories to assist mariners in both the main approach and departure lanes (including the Precautionary Area) in the vicinity of the harbor. Thus, VTS helps to ensure that the total number of vessels transiting the Port does not exceed the design capacity of the Federal Channel limits. Container vessels are required to report their position and destination to the VTS at certain times and locations and may also request information about traffic that could be encountered in the Precautionary Area.

Further, VTS implements the COTP's uniform procedures, including advance notification to vessel operators, vessel traffic managers, and Port Pilots identifying the locations of dredges, derrick barges, and any associated operational procedures or restrictions (e.g., one-way traffic), to ensure safe transit of vessels to and from the Project area. In addition, a communication system links USCG COTP, VTS, Los Angeles Pilot Station, Long Beach Pilot Station, and Port of Long Beach Security. This system is used to exchange vessel movement information and safety notices among the various organizations.

If there are scheduling conflicts and/or if vessel occupancy within the harbor reaches operating capacity, vessels are required to anchor at the anchorages outside the breakwater until mariners receive COTP authorization to initiate transit into the harbor.

Traffic Separation Schemes

A Traffic Separation Scheme (TSS) is an internationally recognized vessel routing designation, which separates opposing flows of vessel traffic into lanes, including a zone between lanes where transit is to be avoided. TSSs have been designated to help direct offshore vessel traffic along portions of the California coastline, such as the Santa Barbara Channel. Vessels are not required to use a TSS, but failure to do so if one is available would be a major factor for determining liability in the event of a collision. TSS designations are proposed by USCG, but they must be approved by the International Maritime Organization (IMO), which is part of the United Nations.

Safety Fairways

Offshore waters in high traffic areas are designated as safety fairways, which means that placement of surface structures, such as oil platforms, is prohibited to ensure safer navigation. USACE is prohibited from issuing permits for surface structures (e.g., oil platforms) in safety fairways, which are frequently located between a port and the entry into a TSS.

Precautionary and Regulated Navigation Areas

A Precautionary Area is designated in congested areas near the harbor entrances. A Precautionary Area enables harbor officials to set speed limits or establish other safety precautions for ships entering or departing a harbor. A regulated navigation area (RNA) is a water area within a defined boundary for which federal regulations have been established under 33 Code of Federal Regulations (CFR) 165.1109 for vessels navigating in this area. In the harbor, RNA boundaries match the designated Precautionary Area. For example, 33 CFR 165.1152 identifies portions of the Precautionary Area as RNA.

1 The Precautionary Area for the Port is defined by a line that extends south from Point
2 Fermin approximately seven nautical miles (nm), then due east approximately seven nm,
3 then northeast for approximately three nm, and then back northwest (see Figure 3.9-1).
4 Ships are required to cruise at speeds of 12 knots or less upon entering the Precautionary
5 Area.³ A minimum vessel separation of 0.25 nm is also required in the Precautionary
6 Area. The Marine Exchange monitors vessel traffic within the Precautionary Area.

7 As shown in Figure 3.9-1, the LA-2 ocean disposal site is located partially within the
8 Precautionary Area (at the western boundary) and partially within the traffic Separation
9 zone (USEPA, 2005).

10 **Pilotage**

11 The Port Complex does not require the use of a Port Pilot for every vessel that transits in
12 or out of the San Pedro Bay area and adjacent waterways. Use of a Port Pilot is required,
13 however, for all vessels of foreign registry and U.S. vessels that do not have a federally
14 licensed pilot on board. Because most commercial vessels entering the Port are of
15 foreign registry, the number of large commercial vessels transiting without Port Pilot
16 services is negligible. The Los Angeles and Long Beach pilot services and the Marine
17 Exchange all operate radar systems to monitor vessel traffic in the harbor, and
18 information is available to all vessels upon request. The pilot services also manage the
19 use of anchorages under an agreement with USCG. A communication system links key
20 operational centers: USCG COTP, VTS, Los Angeles Pilot Station, Long Beach Pilot
21 Station, and Port of Long Beach Security. This system is used to exchange vessel-
22 movement information and safety notices among the various organizations.

23 ***Los Angeles Pilot Service***

24 Los Angeles Port Pilots maintain round-the-clock service in San Pedro Bay, ensuring a
25 safe flow of ship traffic to and from Los Angeles Harbor. Based at Berth 68, pilots board
26 arriving vessels in the vicinity of the Los Angeles Sea Buoy to guide incoming ships to
27 dock. They also provide assistance to outbound ships.

28 The Los Angeles Pilot Service dates back to 1907, when the Port of Los Angeles was
29 founded. Today, the Pilot Service employs approximately 30 dedicated professionals,
30 combining the skills of pilots, dispatchers, and boat crews to provide expert pilotage
31 services to Port of Los Angeles customers.

32 The mission of the Los Angeles Pilot Service is to provide safe, reliable, and efficient
33 pilotage and marine services. Over the last decade, the Los Angeles Pilots have safely
34 completed more than 55,000 vessel movements. They are among the best-trained pilots
35 in the maritime industry. After a rigorous two-year training program, each pilot attends
36 manned-model ship handling courses in Grenoble, France, once every four years. Each
37 pilot also attends ship simulator training every two years. The Los Angeles Pilots have
38 an average of 33 years of marine experience and 16 years of piloting experience in San
39 Pedro Bay.

³According to 33 CFR 165.1152, the speed restriction to 12 knots or less when entering the Precautionary Area applies to power driven vessels of 1,600 or more gross tons, a towing vessel of 8 meters (approximately 26 feet) or more in length engaged in towing, or vessels of 100 or more gross tons carrying one or more passengers for hire.

1 **Port Tariffs**

2 The Port also enforces numerous federal navigation regulations (e.g., Port Tariffs) in the
3 harbor. Specifically, larger commercial vessels (i.e., greater than 300 gross tons) are
4 required to use a federally licensed pilot when navigating inside the breakwater. In most
5 circumstances, vessels employ the services of a federally licensed local pilot from the
6 Los Angeles Pilot Service. When a local pilot is not used, masters must have a local
7 federal pilot license and receive approval from the USCG COTP prior to entering or
8 departing the Port. Port Tariffs also require vessels to notify the affected pilot station(s)
9 in situations when a pilot is not needed before entering, leaving, shifting, or moving
10 between the Ports.

11 **Tug Escort/Assist for Tank Vessels**

12 “Tug Escort” refers to the stationing of tugs in proximity to a vessel as it transits into port
13 to provide immediate assistance should a steering or propulsion failure develop. “Tug
14 Assist” refers to the positioning of tugs alongside a vessel and applying force to assist in
15 making turns, reducing speed, providing propulsion, and docking. State regulations
16 require escort tug(s) to meet inbound, laden tank vessels (carrying 5,000 or more metric
17 tons of oil in bulk as cargo) and tanks vessels shifting within the harbor. The tug(s) then
18 accompany the tank vessel to the berth and assist in berthing. Assist tugs may also be
19 required during port transits (Los Angeles/Long Beach Harbor Safety Committee, 2014).

20 **Physical Oceanographic Real Time System**

21 In partnership with the National Oceanographic and Atmospheric Association (NOAA),
22 National Ocean Service (NOS), California Office of Spill Prevention and Response
23 (OSPR), USCG, and some businesses operating in the Ports, the Marine Exchange
24 operates the Physical Oceanographic Real Time System (PORTS) as a service to those
25 making operational decisions based on oceanographic and meteorological conditions in
26 the vicinity of the Port. PORTS is a system of environmental sensors and supporting
27 telemetry equipment that gathers and disseminates accurate real-time information on
28 tides, visibility, winds, currents, and sea swell to maritime users to assist in the safe and
29 efficient transit of vessels in the Port area. Locally, PORTS is designed to provide
30 crucial information in real time to mariners, oil spill response teams, managers of coastal
31 resources, and others about harbor water levels, currents, salinity, and winds.

32 The instruments that collect the PORTS information are deployed to provide data at
33 critical locations and to allow “now-casting” and forecasting using a mathematical model
34 of the oceanographic processes of the harbor. Data from the sensors are fed into a central
35 collection point. Raw data from the sensors are integrated and processed into information
36 and analysis products, including graphical displays of PORTS data.

37 **Additional Safety Measures**

38 The Port of Los Angeles/Port of Long Beach Harbor Safety Plan (HSP) issued by the Los
39 Angeles/Long Beach Harbor Safety Committee, contains additional procedures for
40 vessels operating in the Port vicinity (Los Angeles/Long Beach Harbor Safety
41 Committee, 2014). The original HSP was issued in 1991 and has since been updated
42 annually. The vessel operating procedures stipulated in the HSP are considered Good
43 Marine Practice. Some of the procedures are federal, state, or local regulations, while
44 other guidelines are non-regulatory “Standards of Care.” Another important safety

1 measure is the issuance of the weekly *Local Notice to Mariners* by the USCG. These
2 notices list various activities that could pose a hazard to mariners in the Port.

3 **Additional Navigation Rules**

4 The USCG “Rules of the Road” apply to all marine vessels, regardless of size. To
5 minimize the potential for accidents, all marine vessels in the Port Complex are required
6 to follow vessel safety policies and regulations contained in the *Navigation Rules:*
7 *International and Inland* (USCG Nav. RuleCG-169).

8 For the open seas, the International Rules apply and were ratified at the Convention on
9 the International Regulations for Preventing Collisions at Sea, 1972. The International
10 Rules apply to all vessels of nations that ratified the treaty, in addition to the United
11 Nations. The International Rules include 38 numbered rules organized into five parts:
12 A – General, B – Steering and Sailing Rules, C – Lights and Shapes, D – Sound and
13 Light Signals, and E – Exemptions.

14 Efforts to unify and update various inland navigation rules culminated in 1980 with the
15 enactment of the Inland Navigation Rules Act (22 CFR 83). The Inland Rules were
16 established under the authorization of International Rule 1(b) to apply to all inland waters
17 of the United States. The Inland Rules numbered one through 38 closely match, in some
18 cases exactly, the International Rules. All marine vessels in the Port are required to
19 follow these vessel safety policies and regulations.

20 **3.9.2.2 Navigational Hazards**

21 Port Pilots can easily identify fixed navigational hazards in the Ports, including
22 breakwaters protecting the Outer Harbor, anchorage areas, and various wharfs and
23 landmasses that compose the Port Complex. These hazards are readily apparent on radar
24 and are currently illuminated. Four bridges cross the navigation channels of both Ports.
25 All bridges have restricted vertical clearances, and two have restricted horizontal
26 clearances as well.

27 Vessels that are waiting to enter the harbor and moor at a berth can anchor at the
28 anchorages outside and inside the breakwaters. Vessels do not require tug assistance to
29 anchor outside the breakwater. The Port currently does not have any anchorages inside
30 the breakwater. For safety reasons, VTS will not assign an anchorage in the first row of
31 sites closest to the breakwater to vessels longer than 656 feet.

32 Vessels are required by law to report failures of navigational equipment, propulsion,
33 steering, or other vital systems to USCG via the COTP office or the COTP representative
34 at VTS as soon as possible. According to VTS, approximately one in 100 vessels calling
35 at the Port Complex experiences a mechanical failure during their inbound or outbound
36 transit.

37 **Vessel Accidents**

38 Although marine safety is thoroughly regulated and managed, accidents can occur during
39 marine navigation. Marine vessel accidents include vessel collisions (between two
40 moving vessels), allisions (between a moving vessel and a stationary object, including
41 another vessel), and vessel groundings. As shown in Table 3.9-2, the number of vessel
42 allisions, collisions, and groundings (ACGs) in the harbor has remained fairly constant
43 between 1996 and 2013. The number of ACGs ranged from three to 12 per year between

1996 and 2013 at an average of seven ACG incidents per year (U.S. Naval Academy 1999; Los Angeles/Long Beach Harbor Safety Committee 2007, 2011, and 2014; and USCG, 2015). Although there are no reliable data on the level of recreational boating incidents in the harbor over this period, the amount of commercial vessel traffic into and out of the harbor has remained fairly constant (\pm two percent). During this time, there has also been a large amount of construction and channel deepening within the Ports. Each of these accidents was subject to a USCG marine casualty investigation, and the subsequent actions taken to minimize or prevent future occurrences.

Table 3.9-2: Allisions, Collisions, and Groundings – Port Complex (Ports of Los Angeles and Long Beach), 1996–2013

Year	ACG Incidents			Total
	Allisions	Collisions	Groundings	
1996	2	4	1	7
1997	1	3	2	6
1998	1	2	3	6
1999	3	4	2	9
2000	3	2	1	6
2001	4	1	0	5
2002	6	5	0	11
2003	4	2	2	8
2004	2	4	6	12
2005	0	1	3	4
2006	4	0	5	9
2007	3	1	6	10
2008	1	1	1	3
2009	3	0	0	3
2010	1*	1*	0	1
2011	7*	7*	1	8
2012	6*	6*	1	7
2013	7	2	0	9

Sources: Los Angeles/Long Beach Harbor Safety Committee 2004, 2007, 2011, and 2014; USCG, 2015; U.S. Naval Academy 1999.

*Allisions and Collisions are not separated in this year's data.

Note: These commercial vessel accidents meet a reportable level defined in 46 CFR 4.05, but do not include commercial fishing vessel or recreational boating incidents.

Close Quarters

To avoid vessels passing too close together, the VTS documents, reports, and takes action on “close-quarters” situations. VTS close-quarters situations are described as vessels passing an object or another vessel closer than 0.25 nm, or 500 yards. These incidents usually occur in the Precautionary Area. No reliable data are available for close-quarters incidents outside the VTS area. Normal action taken in response to close-quarters situations includes initiating informal USCG investigation, sending Letters of Concern to owners and operators, having the involved vessel master visit VTS and review the incident, and USCG enforcement boardings. A 15-year history of the number of

close-quarters situations is presented in Table 3.9-3. Recent near-miss data for 2006 through 2012 were obtained from the 2014 Harbor Safety Plan as shown in Table 3.9-3 (Los Angeles/Long Beach Harbor Safety Committee, 2014). However, no data are available for the 2010, 2011, and 2013 years. Given the relatively steady number of commercial transits over the past several years, a decreasing trend in close-quarters incidents is discernible (Los Angeles/Long Beach Harbor Safety Committee, 2014). This is noticeable in the low number of near-miss situations from 2004 to 2008 and 2012.

Table 3.9-3: Number of VTS-Recorded Close-Quarters Incidents, Ports of Los Angeles and Long Beach (1998–2013)

Year	Number of Close-Quarters Incidents
1998	9
1999	5
2000	1
2001	2
2002	6
2003	4
2004	0
2005	0
2006	0
2007	1
2008	1
2009	5
2010	No data available
2011	No data available
2012	3
2013	No data available

Source: Los Angeles/Long Beach Harbor Safety Committee 2007, 2009 and 2014.

3.9.2.3 Factors Affecting Vessel Traffic Safety

This section summarizes environmental conditions that could affect vessel safety in the harbor area.

Fog

Fog is a well-known weather condition in Southern California. Harbor area fog occurs most frequently in the month of April and then from October through February, when visibility over the San Pedro Bay is below 0.5 mile for seven to 10 days per month. Fog at the Port is mostly a land (radiation) type fog that drifts offshore and worsens in the late night and early morning. Smoke from nearby industrial areas often adds to its thickness and persistence. Along the shore, fog drops visibility to less than 0.5 mile on three to eight days per month from August through April and is generally at its worst in December (Los Angeles/Long Beach Harbor Safety Committee, 2014).

1 **Winds**

2 Wind conditions vary, particularly in fall and winter. Winds can be strongest when the
3 Santa Ana (prevailing winds from the northeast occurring from October through March)
4 winds blow. The Santa Ana winds, though infrequent, can be violent. A Santa Ana
5 condition occurs when a strong high-pressure system resides over the plateau region of
6 Nevada and Utah and generates a northeasterly to easterly flow over Southern California.
7 Aside from weather forecasts, there is little warning of a Santa Ana wind onset. Good
8 visibility and unusually low humidity often prevail for some hours before it arrives.
9 Shortly before arriving on the coast, the Santa Ana winds may appear as an approaching
10 dark brown dust cloud. This positive indication often provides a 10- to 30-minute
11 warning. The Santa Ana wind may come at any time of day and can be reinforced by an
12 early morning land breeze or weakened by an afternoon sea breeze (Los Angeles/Long
13 Beach Harbor Safety Committee, 2014).

14 Winter storms produce strong winds over the San Pedro Bay, particularly southwesterly
15 through northwesterly winds. Winds of 17 knots or greater occur about one to two
16 percent of the time from November through May. Southwesterly through westerly winds
17 begin to prevail in the spring and last into early fall (Los Angeles/Long Beach Harbor
18 Safety Committee, 2014).

19 **Tides**

20 The mean range of tide is 3.8 feet for the Port. The diurnal range is about 5.4 feet, and a
21 range of nine feet may occur at maximum tide (Los Angeles/Long Beach Harbor Safety
22 Plan, 2014).

23 **Currents**

24 Harbor tidal currents follow the axis of the channels and rarely exceed one knot. The
25 harbor area is subject to seiches (i.e., waves that surge back and forth in an enclosed
26 basin as a result of earthquakes) and surge, with the most persistent and conspicuous
27 oscillation having about a one-hour period. Near Reservation Point, the prominent hourly
28 surge causes velocity variations as great as one knot. These variations often overcome
29 the lesser tidal current, so that the current ebbs and flows at half-hour intervals. The
30 more restricted channel usually causes the surge through the Back Channel to reach a
31 greater velocity at the east end of Terminal Island, rather than west of Reservation Point.
32 In the Back Channel, hourly variation may be 1.5 knots or more. At times, the hourly
33 surge, together with shorter, irregular oscillations, causes a very rapid change in water
34 height and current direction/velocity, which may endanger vessels moored at the piers
35 (Los Angeles/Long Beach Harbor Safety Plan, 2014).

36 USACE ship navigation studies indicate that in the Port channels, current magnitudes are
37 essentially a negligible one-third knot or less. Maximum current velocity in the Angels
38 Gate area is less than one knot. These current magnitudes, determined during a
39 simulation study, are depth-averaged values over three layers. According to Jacobsen
40 Pilot Service, the Long Beach Queens Gate has deeper water than Angels Gate and has
41 more open waterways just inside the breakwater. The pilots have never experienced a
42 current greater than one knot in this area. (Los Angeles/Long Beach Harbor Safety
43 Committee, 2014).

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Water Depths

Table 3.9-4 includes the water depth at various locations in the harbor. The existing depth of the harbor at the Everport Container Terminal (Berths 226-236) is -45 feet mean lower low water (MLLW).

Table 3.9-4: Water Depths within the Port of Los Angeles

Channel/Basin	Depth – MLLW in feet (meters)
Main Channel	-53 (-16.2)
Turning Basin	-53 (-16.2)
West Basin	-53 (-16.2)
East Basin	-53 (-16.2)
North Channel (Pier 300/400)	-53 (-16.2)
North Turning Basin (Pier 300)	-81 (-24.7)
Approach and Entrance Channels	-81 (-24.7)

Source: Los Angeles/Long Beach Harbor Safety Committee 2014

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3.9.2.4 Vessel Traffic

A total of 2,143 vessels called at the Port of Los Angeles in 2013. Vessel traffic to the Port was relatively constant through 2007, but has declined since then as indicated in Table 3.9-5. The increase in cargo volumes prior to 2012 has been accommodated primarily by larger vessels, rather than additional vessels. The Main Channel sees a majority of the commercial vessel traffic and allows access to terminals such as TraPac, China Shipping, Yang Ming, Pasha, Yusen Terminals, Inc. (YTI), and the Everport Container Terminal (Project site).

Table 3.9-5: Ship Calls at the Port of Los Angeles

Year	Ship Calls
1997	2,786
1998	2,569
1999	2,630
2000	3,060
2001	2,717
2002	2,526
2003	2,660
2004	2,850
2005	2,500
2006	2,701
2007	2,537
2008	2,239
2009	2,010
2010	2,182
2011	2,181
2012	2,180
2013	2,143

Source: USACE and Los Angeles Harbor Department (LAHD), 2014; Port of Los Angeles 2015.

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There are two operating berths at the Everport Container Terminal: Berths 226–229 and Berths 230–232. No vessel unloading occurs between Berths 233 and 236. In 2013, the Everport Container Terminal moved 1.24 million TEUs, the result of 166 vessel calls. The terminal handled a maximum of two vessels in a peak day (two departures and two arrivals). The terminal operated approximately 16 hours per day, six to seven days per week and approximately 305 days per year. The majority of vessels calling at the Everport Container Terminal were 4,000- and 8,000-TEU-capacity vessels. No vessels over 8,000 TEUs called at the Everport Container Terminal in 2013 because the terminal cannot currently accommodate vessels larger than 8,000 TEUs.

11 **3.9.3 Applicable Regulations**

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13
14
15
Many laws and regulations are in place to regulate marine terminals, vessels calling at marine terminals, and emergency response/contingency planning. Responsibilities for enforcing or executing these laws and regulations are governed by various federal and local agencies, as described below.

16 **3.9.3.1 Federal Agencies**

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18
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21
A number of federal laws regulate marine terminals and vessels. In general, these laws address design and construction standards, operational standards, and spill prevention and cleanup. Regulations to implement these laws are contained primarily in CFR Titles 33 (Navigation and Navigable Waters), 40 (Protection of Environment), and 46 (Shipping).

1 Since 1789, the federal government has authorized navigation channel improvement
2 projects, and the General Survey Act of 1824 established the role of USACE as the
3 agency responsible for the navigation system. Since then, ports have worked in
4 partnership with USACE to maintain waterside access to port facilities.

5 **3.9.3.2 U.S. Coast Guard**

6 USCG, through CFR Titles 33 (Navigation and Navigable Waters) and 46 (Shipping), is
7 the federal agency responsible for vessel inspection, marine terminal operations safety,
8 coordination of federal responses to marine emergencies, enforcement of marine
9 pollution statutes, marine safety (navigation aids), and operation of the National
10 Response Center (NRC) for spill response. Current USCG regulations require a federally
11 licensed pilot aboard every tanker vessel mooring and unmooring at offshore marine
12 terminals. At the request of USCG, the Los Angeles Pilots (within the Los Angeles
13 Harbor) and Jacobsen Pilots (within the Long Beach Harbor) have agreed to ensure
14 continuous service of a licensed pilot for vessels moving between the Port Complex
15 outside the breakwaters.

16 **3.9.3.3 Department of Defense**

17 The Department of Defense (DoD), through USACE, is responsible for reviewing all
18 aspects of a project and spill response activities that could affect navigation. The
19 USACE Operations and Maintenance (O&M) program is responsible for maintaining
20 navigation channels, removing navigation obstructions, and accomplishing structural
21 repairs. USACE also has regulatory jurisdiction under Section 10 of the Rivers and
22 Harbors Appropriation Act of 1899 for all work and structures in, over, or under
23 navigable waters that could affect the course, location, condition, or navigable capacity of
24 any navigable waters of the United States.

25 **3.9.3.4 Other Organizations**

26 **Marine Exchange of Southern California**

27 As described in Section 3.9.2.1, Vessel Transportation Safety, the Marine Exchange is a
28 non-profit organization affiliated with the Los Angeles Chamber of Commerce. The
29 organization is supported by subscriptions from Port-related organizations that recognize
30 the need for such an organization and use its services. This voluntary service is
31 designated to enhance navigation safety in the Precautionary Area and harbor area of the
32 Ports. The Marine Exchange monitors vessel traffic in the Precautionary Area and
33 operates PORTS (see Section 3.9.2.1) as a service to those making operational decisions
34 based on oceanographic and meteorological conditions in the vicinity of the Ports. The
35 Marine Exchange also jointly operates the VTS with the USCG.

36 **Harbor Safety Committee**

37 The Los Angeles/Long Beach Harbor Safety Committee (Committee) is responsible for
38 planning the safe navigation and operation of tankers, barges, and other vessels in San
39 Pedro Bay and approach areas. The Committee was created under the authority of
40 Government Code Section 8670.23(a), which requires the Administrator of the Office of
41 Oil Spill Prevention and Response to create a Harbor Safety Committee for the
42 Los Angeles/Long Beach Harbor area. The Committee issued the original HSP in 1991
43 and has issued annual updates since. Major issues facing the Committee include the need

1 for escort tugs, required capabilities of escort tugs, and need for new or enhanced vessel
2 traffic information systems to monitor and advise vessel traffic.

3 The Committee is required to review and evaluate the following:

- 4 1) sounding checks;
- 5 2) anchorage designations;
- 6 3) traffic and routings from Port construction and dredging projects;
- 7 4) procedures for routing vessels during emergencies that impact navigation;
- 8 5) communications systems;
- 9 6) channel design plans;
- 10 7) placement and effectiveness of navigational aids;
- 11 8) bridge management requirements;
- 12 9) small vessel congestion in shipping channels;
- 13 10) recommendation as to whether establishing or expanding VTS systems within the
14 harbors is desirable, and recommendations for funding projects;
- 15 11) recommendation for determining when tankers must be accompanied by an escort
16 tug(s);
- 17 12) competitive aspects of recommendations; and
- 18 13) suggested mechanisms to ensure that the provisions of the plan are fully and
19 regularly enforced.

20 The Committee developed a regulatory framework to institutionalize Good Marine
21 Practices and guide those involved in moving tanker vessels, which include the minimum
22 standards that are applicable under favorable circumstances and conditions. The master
23 or pilot arranges for additional tug assistance if bad weather, unusual Port congestion, or
24 other circumstances so require.

25 ***Harbor Safety Plan***

26 The HSP was developed by the Harbor Safety Committee and contains operating
27 procedures for vessels. All of the procedures are considered Best Maritime Practices, but
28 some are regulations while others are non-regulatory Standards of Care. These Vessel
29 Operating Procedures (VOP) have been extracted from the main text of the HSP in order
30 to create a helpful *Quick Reference Guide* containing the most important information
31 necessary for safe, reliable, and environmentally sound vessel movements in and around
32 the Port area. These VOP list only the basics; additional and more detailed information
33 are provided in the chapters of the HSP addressing each topic. Port Tariffs also contain
34 requirements for vessels operating in and around the Port. Nothing in these procedures
35 precludes a master and/or pilot from taking necessary and prudent actions to avoid or
36 mitigate unsafe conditions.

37 The Committee expanded the initial 13 areas targeted for study or comment to 17, and
38 added, in the appendices, the policy for operation of the Catalina Federal Anchorages and
39 guidelines for container vessel bunker barge safety. Previously separate Chapters XVII,
40 “Inclement Weather,” and XVIII, “Restricted Visibility,” were combined.

41 Among other requirements and standards, the HSP provides specific rules for navigation
42 of vessels in reduced visibility conditions. The HSP does not recommend transit for

1 vessels greater than 150,000 deadweight tonnage (DWT) if visibility is less than one nm.
2 For all other vessels, transit is not recommended if visibility is less than 0.5 nm.

3 The HSP also establishes vessel speed limits. In general, speeds should not exceed
4 12 knots inside the Precautionary Area or six knots in the harbor. These speed
5 restrictions do not preclude the master or pilot from adjusting speeds to avoid or mitigate
6 unsafe conditions. Weather, vessel maneuvering characteristics, traffic density,
7 construction, dredging, and other possible issues are taken into account.

8 **Vessel Transportation Service**

9 As described previously, VTS is a shipping service operated by USCG or public/private
10 sector consortiums (see Section 3.9.2.1). These services monitor traffic in both approach
11 and departure lanes, as well as internal movement in harbor areas. These services use
12 radar, radio, and visual inputs to gather real time vessel traffic information and broadcast
13 traffic advisories and summaries to assist mariners. The VTS that services the Port
14 Complex is located at the entrance of the Los Angeles/Long Beach Harbor area. The
15 system is owned by the Marine Exchange and is operated jointly by the Marine Exchange
16 and USCG under the oversight of the OSPR and the Committee.

17 This system provides information on vessel traffic and ship locations so that vessels can
18 avoid collisions, allisions, and groundings in the approaches to the harbor. The VTS
19 assists in the safe navigation of vessels approaching the Port in the Precautionary Area.
20 The partnership is a unique and effective approach that has gained acceptance from the
21 maritime community.

22 **3.9.4 Impacts and Mitigation Measures**

23 **3.9.4.1 Methodology**

24 Impacts on marine transportation are assessed by determining the general increase in
25 vessel traffic resulting from the proposed Project or an alternative compared to the ability
26 of the Port to safely accommodate vessel traffic and the potential for proposed Project
27 related activities (or alternative-related activities) during both construction and operation
28 to increase risks to vessel traffic. Existing regulations regarding vessel safety are
29 designed to avoid potential impacts and are considered standard practice.

30 **CEQA Baseline**

31 Section 15125 of the CEQA Guidelines requires EIRs to include a description of the
32 physical environmental conditions in the vicinity of a project that exist at the time of the
33 NOP. These environmental conditions normally would constitute the baseline physical
34 conditions by which the CEQA lead agency (e.g., LAHD) determines if an impact is
35 significant. The NOP for the proposed Project was published in October 2014. For
36 purposes of this Draft EIS/EIR, the CEQA baseline takes into account the throughput for
37 the 12-month calendar year preceding NOP publication (January through December
38 2013) in order to provide a representative characterization of terminal activity levels
39 throughout the complete calendar year preceding release of the NOP. In 2013, the
40 Everport Container Terminal encompassed 205.4 acres (approximately 205 acres -180.6
41 acres under its long-term lease plus an additional 24.8 acres on month-to-month space
42 assignment), operated eight cranes, handled approximately 1.24 million TEUs, and had

1 166 vessel calls. The CEQA baseline conditions are also described in Section 2.7.1 and
2 summarized in Table 2-1 in Chapter 2, Project Description.

3 The CEQA baseline represents the setting at a fixed point in time. The CEQA baseline
4 differs from the No Project Alternative (Alternative 2) in that the No Project Alternative
5 addresses what is likely to happen at the Project site over time without improvements or
6 approval of the proposed Project, starting from the existing conditions. Therefore, the No
7 Project Alternative allows for growth at the Project site that could be expected to occur
8 without additional approvals, whereas the CEQA baseline does not.

9 **NEPA Baseline**

10 For purposes of this Draft EIS/EIR, the evaluation of significance under NEPA is defined
11 by comparing the proposed Project or other alternative to the NEPA baseline. The NEPA
12 baseline conditions are described in Section 2.7.2 and summarized in Table 2-1 in
13 Chapter 2, Project Description. The NEPA baseline condition for determining
14 significance of impacts includes the full range of construction and operational activities
15 the applicant could implement and is likely to implement absent a federal action, in this
16 case the issuance of a DA permit.

17 Unlike the CEQA baseline, which is defined by conditions at a point in time, the NEPA
18 baseline is not bound by statute to a “flat” or “no-growth” scenario. Instead, the NEPA
19 baseline is dynamic and includes increases in operations for each study year (2017, 2018,
20 2019, 2026, 2033 and 2038), which are projected to occur absent a DA permit. Federal
21 (DA) permit decisions focus on direct impacts of the proposed Project permit area, as
22 well as indirect and cumulative impacts in non-jurisdictional areas (e.g., uplands)
23 determined to be within the USACE’s scope of federal control and responsibility.
24 Significance of the impacts of the proposed Project or the alternatives under NEPA is
25 determined by comparing the proposed Project or the alternatives to the NEPA baseline.

26 The NEPA baseline, for purposes of this Draft EIS/EIR, is the same as the No Federal
27 Action Alternative (Alternative 1). Under the NEPA baseline, no dredging or disposal of
28 dredged material, wharf improvements, or crane raising or installation (with related
29 electrical infrastructure) would occur, and the existing terminal capacity would not be
30 increased. The NEPA baseline includes installation of AMP vaults along the existing
31 wharf, which is considered a wharf efficiency improvement that does not require a DA
32 permit because it does not affect the course, condition or capacity of navigable waters of
33 the U.S. The NEPA baseline includes 23.5 acres of additional backlands (addition of the
34 1.5-acre area at the southern end of the terminal and the 22-acre backland expansion area)
35 to improve efficiency, which could occur absent a DA permit.

36 The NEPA baseline assumes that by 2038 the terminal would handle up to approximately
37 1,818,000 TEUs annually, accommodate 208 annual ship calls at two existing berths, and
38 utilize eight existing cranes.

39 **3.9.4.2 Thresholds of Significance**

40 There are no marine transportation thresholds specific to NEPA; therefore, the CEQA
41 thresholds are used for both NEPA and CEQA analysis.

42 According to the *L.A CEQA Thresholds Guide* (City of Los Angeles, 2006), the
43 determination of significance for marine transportation impacts are made on a

1 case-by-case basis. Although this document does not include specific provisions
2 regarding marine transportation, the following criterion was developed in cooperation
3 with LAHD. The proposed Project or alternative would have a significant impact on
4 marine transportation if it would:

5 **VT-1:** Substantially interfere with the operation of designated vessel traffic lanes
6 and/or impair the level of safety for vessels navigating the Main Channel,
7 Harbor, or Precautionary Area.

8 **3.9.4.3 Impact Determination**

9 **Proposed Project**

10 **Impact VT-1a: Proposed Project construction-related marine traffic** 11 **would not substantially interfere with operation of designated vessel** 12 **traffic lanes and/or impair the level of safety for vessels navigating** 13 **the Main Channel, Harbor, or Precautionary Area.**

14 Improvements to the 1,400 feet of wharf at berths 226-229 consist of: (1) installation of
15 king and sheet piles to provide dredging capabilities, and (2) dredging to increase the
16 depth from -45 to -53 feet (MLLW datum) plus allowing for a typical overdepth
17 allowance of two feet with a maximum depth of -55 feet.

18 Construction of the improvements along Berths 226-229 (approximately 1,400 feet)
19 would include (1) installing sheet piles and king piles to accommodate the dredging
20 activities, and (2) dredging to increase the depth from -45 to -53 feet MLLW (plus two
21 feet of overdepth tolerance, for a total of -55 feet MLLW). The maximum pile tip
22 elevation of the king piles would be approximately 55 feet below the mudline, and the
23 maximum sheet pile tip elevation would be approximately 36 feet below the mudline
24 along the approximately 1,400-foot berth. Dredging would remove approximately 30,000
25 cubic yards of sediment from the berth.

26 Construction of the improvements along Berths 230-232 (approximately 1,400 feet)
27 would consist of: (1) installing sheet piles to provide dredging capabilities, and (2)
28 dredging to increase the depth from -45 to -47 feet (MLLW datum) plus allow for a
29 typical overdepth allowance of two feet, for a maximum depth of -49 feet. Sheet piles
30 would be installed to a maximum depth of approximately 36 feet below the mudline.
31 Dredging would remove approximately 8,000 cubic yards of sediment.

32 All of the dredged material, approximately 38,000 cubic yards, would be disposed of at
33 approved sites, which may include LA-2, or an approved upland location. Ocean
34 disposal would involve relatively minor vessel traffic as it would entail one tug boat
35 assisting the transit of each dump scow over an approximately 20 day period. A
36 sampling and analysis program would be implemented to determine suitability for any
37 offshore disposal of material at LA-2.

38 Construction of the proposed Project is expected to take approximately 24 months. In-
39 water construction would be staged such that one vessel could be at berth at any given
40 time. Installation of sheet piles would occur along Berths 230-232, followed by dredging
41 along these berths. Operation of the terminal would continue during construction, with
42 vessels utilizing Berths 226-229. Once work is completed at Berths 230 through 232,

1 king and sheet piles would be installed along Berths 226-229, followed by dredging. The
2 AMP vaults (located at various locations along the wharf) would be constructed
3 concurrently. Operation of the terminal would continue during construction, with vessels
4 using Berths 230-232. The new cranes would be delivered (using a general cargo vessel)
5 and installed along the northern berths following in-water and upland construction (at the
6 end of Project construction). Equipment necessary to raise up to five of the existing
7 cranes is anticipated to arrive via container vessels.

8 The types of marine-based construction equipment and duration of use at the Project site
9 are presented in Table 3.9-6. In-water construction activity along Berths 230-232 would
10 extend over a five-month period during which equipment would be active for a total of
11 approximately 90 workdays. In-water construction equipment would be located within
12 the navigation channel for the full five-month duration. In-water construction activity
13 along Berths 226-229 would extend over a seven-month period during which equipment
14 would be active for a total of approximately 125 workdays. In-water construction
15 equipment would also be located within the navigation channel for the full seven-month
16 duration. In total, in-water construction activity would occur over a 12-month period
17 during which equipment would be active for a total of approximately 215 workdays.
18 Construction activity would occur within the Main Channel adjacent to the Project site.

19

Table 3.9-6: Proposed Project Marine-Based Construction Equipment

Proposed Project Element	Activity	Marine-Based Equipment Type	Number of Active Equipment ¹	Estimated Duration (months)	Days of Activity ²
Sheet Pile Installation along Berths 230-232 and Dredging along Berths 230-232					
Sheet Pile Installation	Pile Driving	Derrick Barge (for pile/vibratory hammer)	1	4	72
		Tug Boat (to move derrick and supply barges)	1		
		Supply Barge (for sheet piles)	1		
		Dive Boat (for inspections)	1		
Dredging – Ocean and/or Upland Disposal ⁴	Dredging	Derrick Barge (for clamshell bucket)	1	1	18
		Dump Scow (to hold and haul dredge material)	2		
		Tug Boat	2-3		
Berths 230-232 Total			9-10	5	90
King and Sheet Pile Installation along Berths 226-229 and Dredging along Berths 226-229					
Sheet and King Pile Installation	Pile Driving	Derrick Barge	1	5	100
		Tug Boat	1		
		Supply Barge	1		
		Dive Boat	1		
Dredging – Ocean and/or Upland Disposal ⁴	Dredging	Derrick Barge	1	2	5
		Dump Scow	2		
		Tug Boat	2-3		
Berths 226-229 Total			9-10	7	125
Total (All In-Water construction)			--	12	112

Source: CDM Smith, 2016.

¹ May extend to other activities, resulting in use of same equipment for a different activity.

² May overlap with other activities, resulting in fewer actual days of equipment operation. Dredge duration is based on the longer of land disposal or ocean disposal duration.

³ Accounts for equipment working only partial days. One day is considered 8 hours; therefore, equipment operating four hours in an eight-hour shift is the equivalent to a half day, and equipment active for a 24-hour period is equivalent to three days.

⁴ Assumes ocean disposal as it has more potential for marine transportation impacts because more equipment would be marine-based.

1 In-water and over-water construction activities in the Main Channel are not expected to
2 result in substantial hazards to vessel traffic or substantially increase the potential for
3 accidents. Although marine-based construction equipment could restrict some vessel
4 movement inside the Main Channel during transport and construction activities, the
5 derrick and supply barges as well as support boats would be highly visible, well-marked,
6 relatively stationary, and located adjacent to the terminal wharf. Further, if dredge
7 material is disposed of at an upland location, the dredge materials would be transported
8 within the navigation channel adjacent to a vacant land area for unloading prior to
9 transport to a landfill.

10 In-water and over-water construction activities are conducted routinely in the Port; and
11 contractors performing in-water and over-water construction activities are subject to
12 applicable rules and regulations stipulated in all LAHD contracts (LAHD, 2016),
13 including navigation hazard markings. Prior to activities that require anchoring vessels in
14 the main navigation channels, the standard vessel safety regulations of the Port require
15 dredging contractors to acquire an Anchorage Waiver Permit (USCG, 2015b). An
16 Anchorage Waiver Permit, issued by USCG, requires notifying the COTP of expected
17 activities, providing official and ongoing notice to mariners during construction,
18 developing a mooring plan, and marking equipment and any debris for visibility.
19 Compliance with Anchorage Waiver Permit requirements would ensure compliance with
20 regulations governing the Outer Harbor of the Port and main navigation channel areas
21 during construction of the proposed Project. Because standard safety precautions would
22 be utilized by all contractors, the presence of the barges and support boats would not
23 substantially affect marine vessel safety in the main channels and connected basin areas.
24 Accordingly, proposed in-water construction equipment would not interfere with existing
25 operations within the Main Channel.

26 Although Project construction would require the operation of marine construction
27 equipment within the Main Channel, such activities are routine at the Port, and the Main
28 Channel is of sufficient width to allow for marine-based construction equipment and
29 regular Port operations to co-exist for temporary periods of time. This co-existence is
30 further improved because contractors performing in-water construction activities are
31 subject to all applicable rules and regulations stipulated in all LAHD contracts (see
32 Section 3.9.3 for descriptions of standard safety precautions). Because the standard
33 safety precautions would be utilized in piloting these vessels, the short-term presence of
34 one to two barges or one to three boats at a time would not reduce the existing level of
35 safety for vessel navigation in the harbor.

36 In addition, if dredge materials would be disposed of at LA-2, dump scows would be
37 transported to LA-2 with tugboats (one tug per scow). LA-2 is located along the western
38 boundary of the Precautionary Area and the traffic separation zone. Cargo vessels
39 entering and exiting the Precautionary Area would do so on either side of LA-2, so ocean
40 dumping at LA-2 would not interfere with vessel navigation. Further, compliance with
41 VTS coordination practices, reduced vessel speed limits, and minimum vessel separation
42 distance requirements would keep construction vessels that navigate the Precautionary
43 Area and within the vicinity of designated vessel traffic lanes to access LA-2 within the
44 accepted norms of navigational safety.

45 **CEQA Impact Determination**

46 The short-term increase in construction vessels - up to ten vessels during each phase of
47 the 12-month construction period (see Table 3.9-6) with only up to an estimated

1 maximum of six vessels at one time in the Main Channel is not expected to significantly
2 increase the potential accident risk for vessel navigation or navigation safety. As
3 discussed above, the waterside construction timeframe is relatively short (total of 12
4 months), and all marine construction vessels would be highly visible, well-marked, and
5 relatively stationary. The majority of in-water construction activity would occur within
6 the Main Channel, which is of sufficient width to allow for marine-based construction
7 equipment and regular Port operations to co-exist for temporary periods of time. Some
8 construction vessel traffic between LA-2 and the Project site would occur if ocean
9 disposal of dredge material is authorized. Standard vessel navigation safety practices
10 described above would ensure that potential marine traffic safety impacts are less than
11 significant. The type of construction for the proposed Project is routine, and adherence to
12 applicable rules, regulations, and safety precautions, as well as preparing and
13 implementing a mooring plan approved by the USCG during construction, would
14 minimize the potential for navigation hazards. Therefore, construction impacts on vessel
15 traffic would be less than significant under CEQA.

16 ***Mitigation Measures***

17 No mitigation is required.

18 ***Residual Impacts***

19 Impacts would be less than significant.

20 **NEPA Impact Determination**

21 The increase in construction vessels (up to 10 vessels) during the 12-month waterside
22 construction period with only up to an estimated maximum of six vessels at one time is
23 not expected to significantly increase the potential accident risk for vessel navigation or
24 navigation safety. As discussed above, all marine construction vessels would be highly
25 visible, well-marked, and relatively stationary. The majority of construction activity
26 would occur within the Main Channel, which is of sufficient width to allow for marine-
27 based construction equipment and regular Port operations to co-exist for temporary
28 periods of time. Some construction vessel traffic between LA-2 and the Project site
29 would occur if ocean disposal of dredge material is authorized. Standard vessel
30 navigation safety practices described above would ensure that potential marine traffic
31 safety impacts are less than significant. The type of construction for the proposed
32 Project is routine, and adherence to applicable rules, regulations, and safety precautions,
33 as well as preparing and implementing a mooring plan approved by the USCG during
34 construction, would minimize the potential for navigation hazards. Therefore,
35 construction impacts on vessel traffic would be less than significant under NEPA.

36 ***Mitigation Measures***

37 No mitigation is required.

38 ***Residual Impacts***

39 Impacts would be less than significant.

40 **Impact VT-1b: Proposed Project operation-related marine traffic**
41 **would not substantially interfere with operation of designated vessel**

1 **traffic lanes and/or impair the level of safety for vessels navigating**
 2 **the Main Channel, Harbor, or Precautionary Area.**

3 By 2038, the projected operational throughput at the Everport Container Terminal under
 4 the proposed Project is expected to grow from 1.24 million TEUs annually to 2,379,525
 5 TEUs annually. The projected annual vessel traffic represents an increase over the
 6 existing operational conditions as shown in Table 3.9-7.

**Table 3.9-7: Existing and Projected Annual Ship Calls under the
 Proposed Project at Full Build-Out (2038)**

	CEQA Baseline (January– December 2013)	NEPA Baseline Year 2038	Proposed Project (2038)	Annual Increase	
				Proposed Project Compared to CEQA Baseline (2038)	Proposed Project Compared to NEPA Baseline (2038)
Ship Calls	166	208	208	42	0

7
 8 The proposed Project would also improve the Everport Container Terminal by improving
 9 the existing berths to accommodate increased vessel sizes, dredging to a depth of -53 feet
 10 MLLW (plus two feet overdepth tolerance) at Berths 226-229 and -47 feet MLLW (plus
 11 two feet overdepth tolerance) at Berths 230-232 to ensure that larger deep-draft ships
 12 would be able to navigate and berth safely, as well as raising up to five existing cranes
 13 and adding five new cranes, and five new AMP vaults.

14 The proposed Project would result in approximately 208 annual ship calls per year
 15 (approximately 17 vessel calls per month) when functioning at maximum capacity in
 16 2038, compared to the existing conditions, which is a 25 percent increase. As described
 17 above and shown in Table 3.9-1, the proposed Project would also accommodate larger
 18 vessels at Berths 226-229 and Berths 230-232 than the terminal can currently
 19 accommodate. Berths 226-229 can currently service vessels up to 8,000 TEUs, Berths
 20 230-232 can currently service vessels up to 8,000 TEUs, and Berths 233-236 currently do
 21 not service any vessels. The proposed dredging to deepen Berths 226-229 and Berths
 22 230-232, the raising of existing cranes, and the addition of five new cranes would allow
 23 Berths 226-229 to service vessels up to 16,000 TEUs, and Berths 230-232 to service
 24 vessels up to 10,000 TEUs. Thus, the proposed Project would not only result in an
 25 increase in the number of vessels, but would result in larger vessels calling at the terminal
 26 and navigating the harbor waters.

27 There would be an increase in the size of vessels and an increase in approximately 42
 28 additional annual ship calls compared to existing conditions. This would result in
 29 increased vessel traffic in the Main Channel, Outer Harbor, Precautionary Area, and
 30 coastwise traffic lanes, which are all of sufficient size and depth to accommodate the
 31 proposed increase in operational vessel traffic and sizes. In addition, there are several
 32 oil platforms located south of the harbor and to the east of the northbound coastwise
 33 traffic lane approach to the Precautionary Area. These oil platforms are located outside
 34 of the established shipping traffic lanes that vessels use in their travels to and from the

1 Port (Department of Interior, Bureau of Ocean Energy Management [BOEM], 2014).
2 Because the proposed increased Project vessels would utilize the established traffic lanes
3 in their approach to the Port, the increase in Project vessels and sizes are not expected to
4 cause or result in allisions with the platforms.

5 Further, given the continued use of standard practices, including adherence to HSP speed-
6 limit regulations, adherence to limited-visibility guidelines, VTS monitoring
7 requirements, and Port Tariffs requiring vessels of foreign registry and U.S. vessels that do
8 not have a federally licensed pilot on board to use a Port Pilot for transit in and out of the
9 San Pedro Bay area and adjacent waterways, the projected increase in annual ship calls in
10 the Main Channel at Berths 226-232 would not significantly decrease the margin of
11 safety for marine vessels in the Project area. Scheduling of ship calls from outside the
12 breakwaters to Berths 226-232 would continue to be authorized by the COTP to ensure
13 that the projected increase in vessel traffic would not result in changes to routing or
14 vessel safety procedures. Continued implementation of COTP uniform procedures
15 (described above), including providing advanced notification to vessel operators, vessel
16 traffic managers, and Port Pilots to identify the location of dredges, derrick barges, or
17 other possible obstructions and any associated operational procedures or restrictions (e.g.,
18 one-way traffic), would ensure safe transit of vessels operating within and to and from
19 the Project site.

20 **CEQA Impact Determination**

21 Operation of the proposed Project would result in an increase of up to 42 ship calls per
22 year or approximately four per month (total of 208 annual vessel calls) by 2038 when the
23 terminal functions at maximum capacity compared to the existing 166 ship calls under
24 the CEQA baseline. The addition of 42 ship calls annually would represent an increase of
25 only 1.96 percent over total annual ship calls at the Port in 2013, which was 2,143. The
26 proposed Project would also result in an increase in the size of vessels calling at the
27 Everport Container Terminal.

28 Although the additional 42 ship calls per year would increase vessel traffic in the Main
29 Channel, Outer Harbor, Precautionary Area, and coastwise traffic lanes, the proposed
30 Project would not significantly increase vessel congestion or compromise safety within
31 these areas or in the open-ocean approach corridors. The Main Channel, Outer Harbor,
32 Precautionary Area, and coastwise traffic lanes are of sufficient size and depth to
33 accommodate the proposed increase in operational vessel traffic. Continued use of
34 standard practices, including adherence to HSP speed-limit regulations, adherence to
35 limited-visibility guidelines, VTS monitoring, and compliance with Port Tariffs would
36 help to ensure safe transit. More specifically, for vessels over 300 tons, the Los Angeles
37 Port Pilot Service would directly assist with transit in and out of the San Pedro Bay area
38 and adjacent waterways, including to dock for inbound vessels. These highly trained
39 professionals have successfully navigated over 55,000 vessel movements over the past
40 decade. Adherence to the navigation standards and regulations in place combined with the
41 use of a highly trained Los Angeles Port Pilot significantly minimizes the potential of
42 encountering or causing a navigation hazard. Furthermore, the increase in Project vessel
43 traffic is not expected to result in significant safety hazards related to potential allisions
44 with oil platforms near the traffic lanes because oil platforms are highly visible and vessel
45 are expected to stay within the established lane boundaries. Therefore, vessel navigation
46 impacts associated with operation of the proposed Project would be less than significant
47 under CEQA.

1 **Mitigation Measures**

2 No mitigation is required.

3 **Residual Impacts**

4 Impacts would be less than significant.

5 **NEPA Impact Determination**

6 Project operations would result in a maximum of 208 ship calls by, which is the same as
7 the NEPA baseline. Although vessel calls under the proposed Project would be the same
8 as the NEPA baseline, the proposed Project would handle an additional 561,525 TEUs
9 over the NEPA baseline, which would require due to potentially larger vessels visiting
10 the terminal (than would occur under the NEPA baseline). However, the Main Channel,
11 Outer Harbor, Precautionary Area and coastwise traffic lanes are of sufficient size and
12 depth to accommodate the anticipated increase in vessel size calling at the Everport
13 Container Terminal. Continued use of standard practices, including adherence to HSP
14 speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring, and
15 compliance with Port Tariffs would help to ensure safe transit. More specifically, for
16 vessels over 300 tons, the Los Angeles Port Pilot Service would directly assist with transit
17 in and out of the San Pedro Bay area and adjacent waterways, including to dock for
18 inbound vessels. These highly trained professionals have successfully navigated over
19 55,000 vessel movements over the past decade. Adherence to the navigation standards and
20 regulations in place combined with the use of a highly trained Los Angeles Port Pilot
21 significantly minimizes the potential of encountering or causing a navigation hazard.
22 Furthermore, the increase in vessel sizes compared to the NEPA baseline is not expected
23 to result in significant safety hazards related to potential allisions with oil platforms near
24 the traffic lanes because oil platforms are highly visible and vessel are expected to stay
25 within the established lane boundaries. Therefore, the proposed Project would not
26 substantially interfere with operation of designated vessel traffic lanes and/or impair the
27 level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.
28 The proposed Project would result in less than significant impacts under NEPA.

29 **Mitigation Measures**

30 No mitigation is required.

31 **Residual Impacts**

32 No impacts would occur.

33 **Alternative 1 – No Federal Action**

34 Alternative 1 is a NEPA-required No Action Alternative for purposes of this Draft
35 EIS/EIR. Alternative 1 includes the activities that would occur absent a federal permit
36 (DA permit) and could include improvements that require a local permit. Absent a DA
37 permit, no dredging, dredged material disposal, in-water pile installation, raising existing
38 or new crane installation would occur. The existing terminal's ability to handle larger
39 ships (compared to current terminal constraints) would be facilitated by activities that
40 require a DA permit (dredging, in-water pile driving, and the raising of cranes or
41 installation of new cranes). Therefore, without the activities that address the constraints
42 of the terminal's operating berths the existing terminal berth capacity would not be

1 increased. The No Federal Action Alternative includes 23.5 acres of additional backlands
2 to improve efficiency, which could occur absent a DA permit.

3 The terminal site under Alternative 1 would operate as an approximately 229-acre
4 container terminal where cargo containers are loaded to/from vessels, temporarily stored
5 on backlands, and transferred to/from via trucks or on-dock rail. Based on the throughput
6 projections, the Project site is expected to operate at its capacity of approximately
7 1,818,000 TEUs and require 208 vessel calls by 2038.

8 **Impact VT-1a: Alternative 1 construction-related marine traffic would**
9 **not substantially interfere with operation of designated vessel traffic**
10 **lanes and/or impair the level of safety for vessels navigating the Main**
11 **Channel, Harbor, or Precautionary Area.**

12 Under the No Federal Action Alternative, no in-water, or over-water terminal
13 improvements would occur, but 23.5 acres of backlands would be added to the existing
14 205-acre terminal, which would continue to operate through 2038.

15 **CEQA Impact Determination**

16 Alternative 1 would result in no construction-related vessel trips; therefore, no impacts to
17 marine transportation would occur under CEQA.

18 ***Mitigation Measures***

19 No mitigation is required.

20 ***Residual Impacts***

21 No impacts would occur.

22 **NEPA Impact Determination**

23 Alternative 1 would not include any in- water or over-water construction, and would not
24 include new infrastructure or features within 100-feet of the water's edge that require a
25 DA permit. Although Alternative 1 would include new AMP vaults at the wharf, they are
26 efficiency improvements that would not extend beyond the federal pierhead line, and are
27 therefore included in the NEPA baseline. Alternative 1 would include backlands
28 expansion of 23.5 acres; however, these features are located outside of the federal permit
29 area and are also included in the NEPA baseline. Therefore, no in-water construction
30 would occur and there would be no incremental difference between Alternative 1 and the
31 NEPA baseline. As a consequence, Alternative 1 would result in no impact to marine
32 transportation under NEPA.

33 ***Mitigation Measures***

34 No mitigation is required.

35 ***Residual Impacts***

36 No impacts would occur.

37 **Impact VT-1b: Alternative 1 operation-related marine traffic would not**
38 **substantially interfere with operation of designated vessel traffic**

lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.

Under the No Federal Action Alternative, when operating at full capacity by 2038, the Everport Container Terminal is projected to grow from 1,240,773 TEUs annually to 1,818,000 TEUs annually. The projected annual vessel traffic under Alternative 1 would be the same as the NEPA baseline, as shown in Table 3.9-8 below. This increase in throughput would require 208 annual ship calls, which is a net increase of 42 vessel calls above the CEQA baseline per year. This alternative would result in the Everport Container Terminal continuing to operate with its two berths (Berths 226-229 and Berths 230-232) at their existing depths, and would only be able to accommodate vessels up to 8,000 TEUs.

Table 3.9-8: Existing and Projected Annual Ship Calls under Alternative 1 at Full Build-Out (2038)

	CEQA Baseline (January–December 2013)	NEPA Baseline Year (2038)	Alternative 1 – No Federal Action (2038)	Annual Increase	
				Alternative 1 Compared to CEQA Baseline (2038)	Alternative 1 Compared to NEPA Baseline (2038)
Ship Calls	166	208	208	+42	0

CEQA Impact Determination

The Everport Container Terminal under Alternative 1 would increase its throughput to 1,818,000 TEUs by 2038, which would require 208 annual ship calls compared to the existing 166 ship calls under the CEQA baseline. The addition of 42 ship calls annually would represent an increase of only 1.96 percent over total annual ship calls at the Port in 2013, which was 2,143. Given the continued adherence to standard navigation and piloting safety protocols and measures, as previously described for the proposed Project, the projected increase in annual ship calls in the harbor would not significantly decrease the margin of safety for marine vessels in the Project area or transit of vessels operating to and from the Project area. Furthermore, the increase in terminal vessel traffic from operation of Alternative 1 is not expected to result in significant safety hazards related to potential allisions with oil platforms near the traffic lanes because oil platforms are highly visible and vessels are expected to stay within the established lane boundaries. Therefore, marine vessel safety impacts associated with terminal operations under Alternative 1 would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The No Federal Action Alternative would have the same operational conditions as the NEPA baseline, including 1,818,000 TEUs annually, 208 ship calls per year, and two peak day ship calls (two departures and two arrivals) during the peak seasons. Therefore, there would be no incremental difference between Alternative 1 and the NEPA baseline. As a consequence, Alternative 1 would result in no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Alternative 2 – No Project

Alternative 2 is a CEQA-only alternative. The No Project Alternative is not evaluated under NEPA because NEPA requires an evaluation of the No Federal Action Alternative (see Section 2.9.1.2), which is Alternative 1 and analyzed above. Section 15126.6(e) of the State CEQA Guidelines requires the analysis of a no-project alternative. This no-project analysis must discuss the existing conditions as well as what would be reasonably expected to occur in the foreseeable future if the proposed Project is not approved.

Under Alternative 2, no construction activities would occur in-water, over-water, or in backland areas. LAHD would not implement any terminal improvements or increases in backland acreage. No new cranes or the raising of existing cranes would be implemented and no dredging would occur. The current lease that expires in 2028 allows for a 10-year extension, which would allow for continued operations through 2038.

Under the No Project Alternative, the existing Everport Container Terminal would continue to operate as a 205-acre container terminal. Based on the throughput projections for the Port and current terminal configuration, the terminal under Alternative 2 is expected to operate at its capacity of approximately 1,818,000 TEUs with 208 annual ship calls by 2038.

Impact VT-1a: Alternative 2 construction-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.

CEQA Impact Determination

Alternative 2 would not result in any improvements to the existing terminal. No construction of in-water or over-water features would occur under Alternative 2, and therefore, no increase in marine vessels or safety impacts associated with construction of Alternative 2 improvements would occur under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

The impact of the No Project Alternative is not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (Alternative 1 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Impact VT-1b: Alternative 2 operation-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.

Under the No Project Alternative, Everport Container Terminal throughput is projected to grow from 1,240,773 TEUs annually to 1,818,000 TEUs annually. The projected annual vessel traffic represents an increase over the existing operational conditions, as shown in Table 3.9-9 below. This increase in throughput would require 208 annual ship calls, which is a net increase of 42 vessel calls per year over 2013 levels. This alternative would result in the Everport Container Terminal continuing to operate with its two berths (Berths 226-229 and Berths 230-232) at their existing depths. Additionally, as shown in Table 3.9-1 above, the vessel sizes that can be serviced at the Everport Container Terminal associated with Alternative 2 would be similar to existing conditions and smaller than the proposed Project. Berths 226-229 and Berths 230-232 can currently service vessels up to 8,000 TEUs.

Table 3.9-9: Existing and Projected Annual Ship Calls under Alternative 2 at Full Build-Out (2038)

	CEQA Baseline (January–December 2013)	NEPA Baseline Year (2038)	Alternative 2 – No Project (2038)	Annual Increase	
				Alternative 2 Compared to CEQA Baseline (2038)	Alternative 3 Compared to NEPA Baseline (2038)
Ship Calls	166	208	208	+42	0

CEQA Impact Determination

The Everport Container Terminal under Alternative 2 would increase its throughput to 1,818,000 TEUs by 2038, which would require 208 annual ship calls compared to the existing 166 ship calls under the CEQA baseline. The addition of 42 ship calls annually

1 would represent an increase of only 1.96 percent over total annual ship calls at the Port in
2 2013, which was 2,143. Given the continued adherence to standard navigation and
3 piloting safety protocols and measures, the projected increase in annual ship calls in the
4 harbor would not significantly decrease the margin of safety for marine vessels in the
5 Project area or transit of vessels operating to and from the Project area. Furthermore, the
6 increase in terminal vessel traffic from operation of Alternative 2 is not expected to result
7 in significant safety hazards related to potential allisions with oil platforms near the
8 traffic lanes because oil platforms are highly visible and vessel are expected to stay
9 within the established lane boundaries. Therefore, marine vessel safety impacts
10 associated with terminal operations under Alternative 2 would be less than significant
11 under CEQA.

12 ***Mitigation Measures***

13 No mitigation is required.

14 ***Residual Impacts***

15 Impacts would be less than significant.

16 **NEPA Impact Determination**

17 The impact of the No Project Alternative is not required to be analyzed under NEPA.
18 NEPA requires the analysis of a No Federal Action Alternative (Alternative 1 in this
19 document).

20 ***Mitigation Measures***

21 Mitigation measures are not applicable.

22 ***Residual Impacts***

23 An impact determination is not applicable.

24 **Alternative 3 – Reduced Project: Reduced Wharf Improvements**

25 Under Alternative 3, there would be two operating berths after construction. Similar to
26 the proposed Project, dredging would occur to deepen Berths 226-229 to -53 feet MLLW
27 plus two feet of overdepth tolerance (total of -55 feet MLLW). However, Berths 230-232
28 would remain at their existing depth (-45 feet). This alternative would require less
29 dredging than the proposed Project (by approximately 8,000 cubic yards) and king and
30 sheet pile installation only at Berths 226-229. Based on the throughput projections, this
31 alternative is expected to operate at its capacity of approximately 2,250,000 TEUs by
32 2038. This alternative results in slightly less TEU throughput than the proposed Project.
33 This alternative would accommodate the largest vessels (16,000 TEUs) at Berths 226-
34 229, but the existing design depth that remains at Berths 230-232 would only be capable
35 of handling vessels up to 8,000 TEUs. Other proposed Project elements, such as
36 installation of AMP and backland improvements would be implemented under this
37 alternative. Under this alternative, 208 vessels would call on the terminal in by 2038,
38 which is with the same as the proposed Project. Additionally, this alternative would
39 result in a maximum of two peak day ship calls (two departures and two arrivals over a
40 24-hour period) which is also with the same as the proposed Project.

41

1 **Impact VT-1a: Alternative 3 construction-related marine traffic would**
2 **not substantially interfere with operation of designated vessel traffic**
3 **lanes and/or impair the level of safety for vessels navigating the Main**
4 **Channel, Harbor, or Precautionary Area.**

5 Construction of Alternative 3 would include installation of king and sheet piles, and
6 dredging to increase the depth from -45 to -53 feet MLLW (plus two feet of overdepth
7 tolerance) at Berths 226-229. King piles would be installed approximately 55 feet below
8 the mudline and would be installed over approximately 1,400 linear feet along the berth.
9 Sheet piles would be installed along the wharf to approximately 36 feet below the
10 mudline. Dredging under Alternative 3 would require the removal of approximately
11 38,000 cubic yards of sediment, and material would be disposed of at an approved site,
12 which may include LA-2 or an approved upland location. Ocean disposal would involve
13 relatively minor vessel traffic as it would only require one tug boat one assisting the
14 transit of each dump scow over approximately 15 days. As with the proposed Project,
15 compliance with VTS coordination, speed limit reductions, and minimum vessel
16 separation distances would keep navigational safety impacts during transportation of
17 dump scows between the project site and LA-2 to a less than significant level.

18 Construction of Alternative 3 is expected to take slightly less than 24 months, with in-
19 water construction taking approximately seven months rather than 12 months with the
20 proposed Project. In-water construction would be staged such that one vessel could be at
21 berth at any given time. King and sheet piles would be installed along Berths 226-229,
22 followed by dredging. The AMP vaults (located at various locations along the wharf)
23 would be constructed concurrently. Operation of the terminal would continue during
24 construction, with vessels using Berths 230-232. The five new cranes would be delivered
25 (using a general cargo vessel) and installed along the northern berths following in-water
26 and upland construction (at the end of Project construction). Equipment necessary to
27 raise up to five of the existing cranes is anticipated to arrive via container vessel.

28 **CEQA Impact Determination**

29 Alternative 3 would increase in-water construction vessels by up to ten vessels during the
30 seven-month construction period with up to an estimated maximum of six vessels at any
31 one time in the Main Channel. The presence of these vessels is not expected to
32 significantly increase the potential accident risk for vessel navigation or navigation
33 safety. As with in-water construction under the proposed Project, the waterside
34 construction timeframe under Alternative 3 is relatively short and all marine construction
35 vessels would be highly visible, well-marked, and relatively stationary. The majority of
36 in-water construction activity would occur within the Main Channel, which is of
37 sufficient width to allow for marine-based construction equipment and regular Port
38 operations to coexist for temporary periods of time. Some construction vessel traffic
39 between LA-2 and the Project site would occur if ocean disposal of dredge material is
40 authorized. Standard vessel navigation safety practices described above would ensure
41 that potential marine traffic safety impacts are less than significant. The type of
42 construction for Alternative 3 is routine, and adherence to applicable rules, regulations,
43 and safety precautions, as well as preparing and implementing a mooring plan approved
44 by the USCG during construction, would minimize the potential for navigation hazards.
45 Therefore, construction impacts for Alternative 3 on vessel traffic would be less than
46 significant under CEQA.

1 ***Mitigation Measures***

2 No mitigation is required.

3 ***Residual Impacts***

4 Impacts would be less than significant.

5 **NEPA Impact Determination**

6 Alternative 3 would increase in-water construction vessels by up to ten vessels during
7 the seven-month construction period, with up to an estimated maximum of six vessels at
8 any one time in the Main Channel. This represents an increase of in-water construction
9 vessels compared to the NEPA baseline; however, the presence of these vessels is not
10 expected to significantly increase the potential accident risk for vessel navigation or
11 navigation safety. As discussed above, all marine construction vessels would be highly
12 visible, well-marked, and relatively stationary. The majority of in-water construction
13 activity would occur within the Main Channel, which is of sufficient width to allow for
14 marine-based construction equipment and regular Port operations to coexist for
15 temporary periods of time. Some construction vessel traffic between LA-2 and the
16 Project site would occur if ocean disposal of dredge material is authorized. Standard
17 vessel navigation safety practices described above would ensure that potential marine
18 traffic safety impacts are less than significant. The type of construction for Alternative 3
19 is routine, and adherence to applicable rules, regulations, and safety precautions, as well
20 as preparing and implementing a mooring plan approved by the USCG during
21 construction, would minimize the potential for navigation hazards. Therefore,
22 construction impacts on vessel traffic for Alternative 3 would be less than significant
23 under NEPA.

24 ***Mitigation Measures***

25 No mitigation is required.

26 ***Residual Impacts***

27 Impacts would be less than significant.

28 **Impact VT-1b: Alternative 3 operation-related marine traffic would not**
29 **substantially interfere with operation of designated vessel traffic**
30 **lanes and/or impair the level of safety for vessels navigating the Main**
31 **Channel, Harbor, or Precautionary Area.**

32 Under Alternative 3, when operating at full capacity by 2038, the Everport Container
33 Terminal throughput is projected to grow to 2,225,000 TEUs annually, slightly less than
34 the proposed Project. The projected annual vessel traffic represents an increase over the
35 existing (baseline) operational conditions, as shown in Table 3.9-10 below.

Table 3.9-10: Existing and Projected Annual Ship Calls under Alternative 3 at Full Build-Out (2038)

	CEQA Baseline (January–December 2013) ³	NEPA Baseline Year (2038)	Alternative 3 – Reduced Project (2038)	Annual Increase	
				Alternative 3 Compared to CEQA Baseline (2038)	Alternative 3 Compared to NEPA Baseline (2038)
Ship Calls	166	208	208	+42	0

As shown in Table 3.9-1, larger vessels would be able to berth at the Everport Container Terminal under Alternative 3 compared to the existing terminal. However, the terminal's capability to service vessels greater than 8,000 TEUs would be less than under the proposed Project because Alternative 3 only deepens Berths 226-229, whereas the proposed Project also deepens Berths 230-232. The proposed dredging to deepen Berths 226-229, along with addition of taller cranes and new larger cranes, would allow Berths 226-229 to service vessels up to 16,000 TEUs. Berths 230-232 would continue to service vessels up to 8,000 TEUs. Thus, in order to reach the capacity of the terminal, the increase in throughput would require 208 annual ship calls by 2038. This represents an increase of 42 vessel calls per year over the CEQA baseline and the same number of vessel calls per year as the NEPA baseline. Alternative 3 would result in larger vessels calling at the terminal and navigating the harbor waters compared to the CEQA and NEPA baselines. Although the increase in annual ship calls would increase vessel traffic (relative to existing conditions) in the Main Channel, Outer Harbor, Precautionary Area, and coastwise traffic lanes, these areas are of sufficient size and depth to accommodate the proposed increase in operational vessel traffic under Alternative 3. In addition, there are several oil platforms located south of the harbor and to the east of the northbound coastwise traffic lane approach to the Precautionary Area. These oil platforms are located outside of the established shipping traffic lanes that vessels use in their travels to the Port (BOEM, 2014). Because the increased Alternative 3 vessels would utilize the established traffic lanes in their approach to the Port, the increase in vessels and their sizes under Alternative 3 are not expected to cause or result in allisions with the platforms.

Given the continued use of standard practices, including adherence to HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements, and Port Tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot on board to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways, the projected increase in annual ship calls in the Main Channel at Berths 226-232 under Alternative 3 (relative to existing conditions) would not significantly decrease the margin of safety for marine vessels in the Project area. Scheduling of ship calls from outside the breakwaters to Berths 226-232 would continue to be authorized by the COTP to ensure that the projected increase in vessel traffic would not result in changes to routing or vessel safety procedures. Continued implementation of COTP uniform procedures, including providing advanced notification to vessel operators, vessel traffic managers, and Port Pilots to identify the location of dredges, derrick barges, or other possible obstructions and any associated operational procedures or restrictions (e.g., one-way traffic), would ensure safe transit of vessels operating within and to and from the Project site.

CEQA Impact Determination

Terminal operations under Alternative 3 would result in 42 additional ship calls to the Project site over the CEQA baseline level, which represents a 1.96 percent vessel call increase relative to total vessel calls at the Port in 2013. Additionally, vessels would be larger in size compared to the CEQA baseline. This alternative would result in a maximum of two peak day ship calls (two departures and two arrivals over a 24-hour period).

Given the continued adherence to standard navigation and piloting safety protocols and measures, as previously described for the proposed Project, the projected increase in annual ship calls under Alternative 3 would not significantly decrease the margin of safety for marine vessels in the Main Channel, the Outer Harbor, Precautionary Area, or coastwise traffic lanes. Furthermore, the increases in vessels and their sizes under Alternative 3 are not expected to result in significant safety hazards related to potential allisions with oil platforms near the traffic lanes because oil platforms are highly visible and vessel are expected to stay within the established lane boundaries. Therefore, marine vessel safety impacts associated with terminal operations under Alternative 3 would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 3 would result in the same annual ship calls to the Project site as the NEPA baseline level. However, vessels would be larger in size compared to the NEPA baseline. This alternative would result in a maximum of two peak day ship calls (two departures and two arrivals) over a 24-hour period.

The Main Channel, Outer Harbor, Precautionary Areas, and coastwise traffic lanes are of sufficient size and depth to accommodate the proposed increase in operational vessel traffic under Alternative 3. Continued use of standard practices, including adherence to HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements, and Port Tariffs requiring the use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways, would minimize potential navigation hazards. The projected increase in vessel sizes under Alternative 3 would not significantly decrease the margin of safety for marine vessels in the Main Channel, the Outer Harbor, Precautionary Area, or coastwise traffic lanes due to continued adherence to standard navigation and piloting safety protocols. Furthermore, the increase in vessel sizes is not expected to result in significant safety hazards related to potential allisions with oil platforms near the traffic lanes because oil platforms are highly visible and vessels are expected to stay within the established lane boundaries. Therefore, marine vessel safety impacts associated with terminal operations under Alternative 3 would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Alternative 4 – Reduced Project: No Backlands Improvements

Under Alternative 4, there would be two improved operating berths after construction; the same as the proposed Project. This alternative would require the same dredging as the proposed Project, but would not include any backland expansion. Up to five of the existing cranes would be raised and five new cranes installed, as well as AMP. Based on the throughput projections, this alternative is expected to operate at its capacity of approximately 2,115,133 TEUs by 2038, which is less than the capacity of the proposed Project. This alternative would accommodate the largest vessels (16,000 TEUs) at Berths 226-229 and vessels up to 10,000 TEUs at Berths 230-232. In addition, this alternative would result in 208 annual vessel calls.

Impact VT-1a: Alternative 4 construction-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, Precautionary Area, or coastwise traffic lanes.

Construction of Alternative 4 would include the same berth improvements as the proposed Project (installation of king and sheet piles along Berths 226-229, and sheet piles along Berths 230-232). Dredging under Alternative 4 would require the removal of approximately 38,000 cubic yards of sediment, which would be disposed of at an approved site, which may include LA-2 or an approved upland location. Ocean disposal would involve relatively minor vessel traffic as it would entail one tug boat assisting the transit of each dump scow over an approximately 20-day period. As with the proposed Project, compliance with VTS coordination, speed limit reductions, and minimum vessel separation distances would keep navigational safety impacts during transportation of dump scows between the project site and LA-2 to a less than significant level.

Construction of Alternative 4 is expected to take approximately 24 months, with in-water construction lasting for approximately 12 months. In-water construction would be staged such that one vessel could be at berth at any given time. The AMP vaults (located at various locations along the wharf) would be constructed concurrently. The new cranes would be delivered (using a general cargo vessel) and installed along the northern berths following in-water construction (at the end of Project construction). Equipment necessary to raise up to five of the existing cranes is anticipated to arrive via container vessel.

CEQA Impact Determination

Alternative 4 would result in an increase in construction vessels; up to ten vessels during the 12-month in-water construction period with up to an estimated maximum of six vessels at one time in the Main Channel. The presence of these vessels is not expected to significantly increase the potential accident risk for vessel navigation or navigation safety. As with in-water construction under the proposed Project, the waterside construction timeframe under Alternative 4 is relatively short, and all marine construction vessels would be highly visible, well-marked, and relatively stationary. All construction would occur within the Main Channel, which is of sufficient width to allow for marine-based construction equipment and regular Port operations to coexist for temporary

1 periods of time. Some construction vessel traffic between LA-2 and the Project site
2 would occur if ocean disposal of dredge material is authorized. Standard vessel
3 navigation safety practices described above would ensure that potential marine traffic
4 safety impacts are less than significant. The type of construction for Alternative 4 is
5 routine, and adherence to applicable rules, regulations, and safety precautions, as well as
6 preparing and implementing a mooring plan approved by the USCG during construction,
7 would minimize the potential for navigation hazards. Therefore, construction impacts for
8 Alternative 4 on vessel traffic would be less than significant under CEQA.

9 ***Mitigation Measures***

10 No mitigation is required.

11 ***Residual Impacts***

12 Impacts would be less than significant.

13 **NEPA Impact Determination**

14 Alternative 4 would result in up to ten vessels during the 12-month in-water construction
15 period, with up to an estimated maximum of six vessels at one time in the Main Channel.
16 This represents an increase of in-water construction vessels compared to the NEPA
17 baseline; however, the presence of these vessels is not expected to significantly increase
18 the potential accident risk for vessel navigation or navigation safety. As discussed above,
19 all marine construction vessels would be highly visible, well-marked, and relatively
20 stationary. The majority of in-water construction activity would occur within the Main
21 Channel, which is of sufficient width to allow for marine-based construction equipment
22 and regular Port operations to coexist for temporary periods of time. Some construction
23 vessel traffic between LA-2 and the Project site would occur if ocean disposal of dredge
24 material is authorized. Standard vessel navigation safety practices described above
25 would ensure that potential marine traffic safety impacts are less than significant. The
26 type of construction for Alternative 4 is routine, and adherence to applicable rules,
27 regulations, and safety precautions, as well as preparing and implementing a mooring
28 plan approved by the USCG during construction, would minimize the potential for
29 navigation hazards. Therefore, construction impacts on vessel traffic for Alternative 4
30 would be less than significant under NEPA.

31 ***Mitigation Measures***

32 No mitigation is required.

33 ***Residual Impacts***

34 Impacts would be less than significant.

35

Impact VT-1b: Alternative 4 operation-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, Precautionary Area, or coastwise traffic lanes.

Under Alternative 4, when operating at full capacity in 2038, the Everport Container Terminal is projected to handle 2,115,133 TEUs annually, less than the proposed Project. The projected annual vessel traffic represents an increase over the existing (baseline) operational conditions, as shown in Table 3.9-11 below.

Table 3.9-11: Existing and Projected Annual Ship Calls under Alternative 4 at Full Build-Out (2038)

	CEQA Baseline (January–December 2013)	NEPA Baseline Year (2038)	Alternative 4– No Backland Improvements (2038)	Annual Increase	
				Alternative 4 Compared to CEQA Baseline (2038)	Alternative 4 Compared to NEPA Baseline (2038)
Ship Calls	166	208	208	+42	0

As shown in Table 3.9-1, the vessel sizes that could be serviced at the Everport Container Terminal under Alternative 4 would be similar to the proposed Project. The proposed dredging to deepen Berths 226-229, along with addition of taller cranes and new larger cranes, would allow Berths 226-229 to service vessels up to 16,000 TEUs. The improvements to Berths 230-232 would accommodate vessels up to 10,000 TEUs. At full capacity of the terminal under Alternative 4 (by 2038), 208 annual ship calls are projected, which is a net increase of 42 vessel calls per year over the CEQA baseline and the same vessel calls per year as the NEPA baseline. Similar to the proposed Project, a maximum of two peak day ship calls over a 24-hour period (two departures and two arrivals) are anticipated, and in general, larger vessels would call at the terminal and navigate harbor waters by 2038. Although the increase in annual ship calls and the increase in the size of vessels relative to existing levels would increase vessel traffic in the Main Channel, Outer Harbor, Precautionary Area, and coastwise traffic lanes, these areas, including the Main Channel, are of sufficient size and depth to accommodate the proposed increase in operational vessel traffic under Alternative 4. In addition, there are several oil platforms located south of the harbor and to the east of the northbound coastwise traffic lane approach to the Precautionary Area. These oil platforms are located outside of the established shipping traffic lanes that vessels use in their travels to the port (BOEM, 2014). Because the increased number of vessel and vessel sizes under Alternative 4 would utilize the established traffic lanes in their approach to and from the Port, the vessels are not expected to cause or result in allisions with the platforms.

Given the continued use of standard practices, including adherence to HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements, and Port Tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot on board to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways, the projected increase in annual ship calls relative to existing levels in the Main Channel at Berths 226-232 under Alternative 4 would not

1 significantly decrease the margin of safety for marine vessels in the Project area.
2 Scheduling of ship calls from outside the breakwaters to Berths 226-232 would continue
3 to be authorized by the COTP to ensure that the projected increase in vessel traffic would
4 not result in changes to routing or vessel safety procedures. Continued implementation of
5 COTP uniform procedures, including providing advanced notification to vessel operators,
6 vessel traffic managers, and Port Pilots to identify the location of dredges, derrick barges,
7 or other possible obstructions and any associated operational procedures or restrictions
8 (e.g., one-way traffic), would ensure safe transit of vessels operating within and to and
9 from the Project site.

10 **CEQA Impact Determination**

11 Terminal operations under Alternative 4 would result in 42 additional ship calls to the
12 Project site over the CEQA baseline level, which represents a 1.96 percent vessel call
13 increase relative to total vessel calls at the Port in 2013. Additionally, vessels would be
14 larger in size compared to the CEQA baseline. This alternative would result in a
15 maximum of two peak day ship calls (two departures and two arrivals over a 24-hour
16 period).

17 Given the continued adherence to standard navigation and piloting safety protocols and
18 measures, as previously described for the proposed Project, the projected increase in
19 annual ship calls under Alternative 4 would not significantly decrease the margin of
20 safety for marine vessels in the Main Channel, the Outer Harbor, Precautionary Area, or
21 coastwise traffic lanes. Furthermore, the increases in vessels and the sizes under
22 Alternative 4 are not expected to result in significant safety hazards related to potential
23 allisions with oil platforms near the traffic lanes because oil platforms are highly visible
24 and vessel are expected to stay within the established lane boundaries. Therefore, marine
25 vessel safety impacts associated with terminal operations under Alternative 4 would be
26 less than significant under CEQA.

27 ***Mitigation Measures***

28 No mitigation is required.

29 ***Residual Impacts***

30 Impacts would be less than significant.

31 **NEPA Impact Determination**

32 Alternative 4 would result in the same annual ship calls to Project site as the NEPA
33 baseline level. Additionally, vessels would be larger in size compared to the NEPA
34 baseline. This alternative would result in a maximum of two peak day ship calls (two
35 departures and two arrivals over a 24-hour period).

36 The Main Channel, Outer Harbor, Precautionary Areas, and coastwise traffic lanes are of
37 sufficient size and depth to accommodate the proposed increase in operational vessel
38 traffic under Alternative 4. Continued use of standard practices, including adherence to
39 HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring
40 requirements, and Port Tariffs requiring the use a Port Pilot for transit in and out of the
41 San Pedro Bay area and adjacent waterways, would minimize potential navigation hazards.
42 Given the continued adherence to standard navigation and piloting safety protocols and
43 measures, as previously described for the proposed Project, the projected increase in

1 vessel sizes under Alternative 4 would not significantly decrease the margin of safety for
2 marine vessels in the Main Channel, the Outer Harbor, Precautionary Area, or coastwise
3 traffic lanes. Furthermore, the increase in vessel numbers and sizes is not expected to
4 result in significant safety hazards related to potential allisions with oil platforms near the
5 traffic lanes because oil platforms are highly visible and vessel are expected to stay
6 within the established lane boundaries. Therefore, marine vessel safety impacts
7 associated with terminal operations under Alternative 4 would be less than significant
8 under NEPA.

9 ***Mitigation Measures***

10 No mitigation is required.

11 ***Residual Impacts***

12 Impacts would be less than significant.

13 **Alternative 5 – Expanded On-Dock Railyard: Wharf and Backland** 14 **Improvements with an Expanded TICTF**

15 Alternative 5 would be the same as the proposed Project, but with an additional on-dock
16 rail track at the TICTF. Under Alternative 5, there would be two operating berths after
17 construction and the terminal would add 23.5 acres of backlands, similar to the proposed
18 Project. This alternative would require the same dredging as the proposed Project. This
19 alternative would accommodate the largest vessels (16,000 TEUs) at Berths 226-229.
20 The new design depth at Berths 230-232 would be capable of handling vessels up to
21 10,000 TEUs. Based on the throughput projections, this alternative is expected to operate
22 at its capacity of approximately 2,379,525 TEUs by 2038, the same as the proposed
23 Project. Under this Project alternative, the terminal would have added capacity at the
24 TICTF and be able to transport a greater number of containers via rail than the proposed
25 Project. Under this alternative, 208 vessels would call annually on the terminal in 2038,
26 the same as the proposed Project.

27 **Impact VT-1a: Alternative 5 construction-related marine traffic would** 28 **not substantially interfere with operation of designated vessel traffic** 29 **lanes and/or impair the level of safety for vessels navigating the Main** 30 **Channel, Harbor, or Precautionary Area.**

31 Construction of Alternative 5 would the same berth improvements as the proposed
32 Project (installation of king and sheet piles along Berths 226-229, sheet piles along
33 Berths 230-232, and dredging). Dredging under Alternative 5 would require the removal
34 of approximately 38,000 cubic yards of sediment, and material would be disposed of at
35 an approved site, which may include LA-2 or an approved upland location. Ocean
36 disposal would involve relatively minor vessel traffic as it would entail one tugboat
37 assisting the transit of each dump scow over an approximately 20-day period. As with
38 the proposed Project, compliance with VTS coordination, speed limit reductions, and
39 minimum vessel separation distances would keep navigational safety impacts during
40 transportation of dump scows between the project site and LA-2 to a less than significant
41 level.

42 Construction of Alternative 5 is expected to take approximately 24 months, with in-water
43 construction lasting approximately 12 months. In-water construction would be staged

1 such that one vessel could be at berth at any given time. The AMP vaults (located at
2 various locations along the wharf) would be constructed concurrently. The five new
3 cranes would be delivered using a general cargo vessel and installed along the northern
4 berths at the end of Project construction. Equipment necessary to raise up to five of the
5 existing cranes is anticipated to arrive via container vessel.

6 ***CEQA Impact Determination***

7 Alternative 5 would result in an increase in in-water construction vessels; approximately
8 ten vessels during the 12-month construction period with up to an estimated maximum of
9 six vessels at one time in the Main Channel. The presence of these vessels is not
10 expected to significantly increase the potential accident risk for vessel navigation or
11 navigation safety. As with in-water construction under the proposed Project, the
12 waterside construction timeframe under Alternative 5 is relatively short and all marine
13 construction vessels would be highly visible, well-marked, and relatively stationary. The
14 majority of in-water construction activity would occur within the Main Channel, which is
15 of sufficient width to allow for marine-based construction equipment and regular Port
16 operations to coexist for temporary periods of time. Some construction vessel traffic
17 between LA-2 and the Project site would occur if ocean disposal of dredge material is
18 authorized. Standard vessel navigation safety practices described above would ensure that
19 potential marine traffic safety impacts are less than significant. The type of construction
20 for Alternative 5 is routine and adherence to applicable rules, regulations, and safety
21 precautions, as well as preparing and implementing a mooring plan approved by the
22 USCG during construction, would minimize the potential for navigation hazards.
23 Therefore, construction impacts for Alternative 5 on vessel traffic would be less than
24 significant under CEQA.

25 ***Mitigation Measures***

26 No mitigation is required.

27 ***Residual Impacts***

28 Impacts would be less than significant.

29 ***NEPA Impact Determination***

30 Alternative 5 would result in an increase in in-water construction vessels; approximately
31 ten vessels during the 12-month construction period with up to an estimated maximum of
32 six vessels at one time in the Main Channel. This represents an increase in in-water
33 construction vessels compared to the NEPA baseline; however, the presence of these
34 vessels is not expected to significantly increase the potential accident risk for vessel
35 navigation or navigation safety. As discussed above, all marine construction vessels
36 would be highly visible, well-marked and relatively stationary. The majority of in-water
37 construction activity would occur within the Main Channel, which is of sufficient width
38 to allow for marine-based construction equipment and regular Port operations to coexist
39 for temporary periods of time. The type of construction for Alternative 5 is routine, and
40 adherence to applicable rules, regulations, and safety precautions, as well as preparing
41 and implementing a mooring plan approved by the USCG during construction, would
42 minimize the potential for navigation hazards. Therefore, construction impacts on vessel
43 traffic for Alternative 5 would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact VT-1b: Alternative 5 operation-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.

Under Alternative 5, when operating at full capacity by 2038, the Everport Container Terminal is projected to grow to 2,379,525 TEUs annually. This is with the same as the proposed Project. The projected annual vessel traffic represents an increase over the existing operational conditions, as shown in Table 3.9-12 below.

Table 3.9-12: Existing and Projected Annual Ship Calls under Alternative 5 at Full Build-Out (2038)

	CEQA Baseline (January–December 2013) ³	NEPA Baseline Year (2038)	Alternative 5 – Expanded On-Dock Railyard (2038)	Annual Increase	
				Alternative 5 Compared to CEQA Baseline (2038)	Alternative 5 Compared to NEPA Baseline (2038)
Ship Calls	166	208	208	+42	0

As shown in Table 3.9-1, the vessel sizes that could be serviced at the Everport Container Terminal associated with Alternative 5 would be larger than under existing conditions, but the same as the proposed Project. The proposed dredging to deepen Berths 226-229, along with the addition of taller cranes and new larger cranes, would allow Berths 226-229 to service vessels up to 16,000 TEUs. The improvements to Berths 230-232 would accommodate vessels up to 10,000 TEUs. At full capacity of the terminal under Alternative 5 (by 2038), 208 annual ship calls are projected, which is a net increase of 42 vessel calls per year over the CEQA baseline and the same number of vessel calls per year as the NEPA baseline. Similar to the proposed Project, a maximum of two peak day ship calls over a 24-hour period (two departures and two arrivals) are anticipated and larger vessels could call at the terminal and navigate harbor waters by 2038. Although the increase in annual ship calls and the increase in the size of vessels would increase vessel traffic in the Main Channel, Outer Harbor, Precautionary Area, and coastwise traffic lanes, these areas are of sufficient size and depth to accommodate the proposed increase in operational vessel traffic under Alternative 5. In addition, there are several oil platforms located south of the harbor and to the east of the northbound coastwise traffic lane approach to the Precautionary Area. These oil platforms are located outside of the established shipping traffic lanes that vessels use in their travels to the Port (BOEM, 2014). Because the increased Alternative 5 vessels are expected to utilize the established traffic lanes in their approach to the Port, the additional vessels should not cause or result in allisions with the platforms.

1 Given the continued use of standard practices, including adherence to HSP speed-limit
2 regulations, adherence to limited-visibility guidelines, VTS monitoring requirements, and
3 Port Tariffs requiring vessels of foreign registry and U.S. vessels that do not have a
4 federally licensed pilot on board to use a Port Pilot for transit in and out of the San Pedro
5 Bay area and adjacent waterways, the projected increase in annual ship calls in the Main
6 Channel at Berths 226-232 under Alternative 5 would not significantly decrease the
7 margin of safety for marine vessels in the Project area. Scheduling of ship calls from
8 outside the breakwaters to Berths 226-232 would continue to be authorized by the COTP
9 to ensure that the projected increase in vessel traffic would not result in changes to
10 routing or vessel safety procedures. Continued implementation of COTP uniform
11 procedures, including providing advanced notification to vessel operators, vessel traffic
12 managers, and Port Pilots to identify the location of dredges, derrick barges, or other
13 possible obstructions and any associated operational procedures or restrictions (e.g.,
14 one-way traffic), would ensure safe transit of vessels operating within and to and from
15 the Project site.

16 **CEQA Impact Determination**

17 Terminal operations under Alternative 5 would result in 42 additional ship calls annually
18 to the Project site over the CEQA baseline level, which represents a 1.96 percent vessel
19 call increase relative to total vessel calls in 2013 at the Port. Additionally, vessels would
20 be larger in size compared to the CEQA baseline. This alternative would result in a
21 maximum of two peak day ship calls (two departures and two arrivals) over a 24-hour
22 period.

23 Given the continued adherence to standard navigation and piloting safety protocols and
24 measures as previously described for the proposed Project, the projected increase in
25 annual ship calls under Alternative 5 would not significantly decrease the margin of
26 safety for marine vessels in the Main Channel, the Outer Harbor, Precautionary Area, or
27 coastwise traffic lanes. Furthermore, the increase in project vessel traffic is not expected
28 to result in significant safety hazards related to potential allisions with oil platforms near
29 the traffic lanes because oil platforms are highly visible and vessels are expected to stay
30 within the established lane boundaries. Therefore, marine vessel safety impacts
31 associated with terminal operations under Alternative 5 would be less than significant
32 under CEQA.

33 ***Mitigation Measures***

34 No mitigation is required.

35 ***Residual Impacts***

36 Impacts would be less than significant.

37 **NEPA Impact Determination**

38 Alternative 5 would result in the same number of ship calls annually to Project site as the
39 NEPA baseline. However, vessels would be larger in size compared to the NEPA
40 baseline. This alternative would result in a maximum of two peak day ship calls (two
41 departures and two arrivals) over a 24-hour period.

42 The Main Channel, Outer Harbor, Precautionary Areas, and coastwise traffic lanes are of
43 sufficient size and depth to accommodate the proposed increase in operational vessel

1 traffic under Alternative 5. Continued use of standard practices, including adherence to
2 HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring
3 requirements, and Port Tariffs requiring the use a Port Pilot for transit in and out of the
4 San Pedro Bay area and adjacent waterways, would minimize potential navigation hazards.
5 Given the continued adherence to standard navigation and piloting safety protocols and
6 measures, as previously described for the proposed Project, the projected increase in
7 vessel sizes under Alternative 5 would not significantly decrease the margin of safety for
8 marine vessels in the Main Channel, the Outer Harbor, Precautionary Area, or coastwise
9 traffic lanes. Furthermore, the increases in vessel numbers and sizes are not expected to
10 result in significant safety hazards related to potential allisions with oil platforms near the
11 traffic lanes because oil platforms are highly visible and vessels are expected to stay
12 within the established lane boundaries. Therefore, marine vessel safety impacts
13 associated with terminal operations under Alternative 5 would be less than significant
14 under NEPA.

15 ***Mitigation Measures***

16 No mitigation is required.

17 ***Residual Impacts***

18 Impacts would be less than significant.

19 **3.9.4.4 Summary of Impact Determinations**

20 Table 3.9-13 summarizes the CEQA and NEPA impact determinations of the proposed
21 Project and alternatives related to Marine Transportation, as described in the detailed
22 discussion above. This table is meant to allow easy comparison between the potential
23 impacts of the proposed Project and alternatives with respect to this resource. Identified
24 potential impacts may be based on federal, state, or City significance criteria; LAHD
25 criteria; and the scientific judgment of the report preparers.

26 For each impact threshold, the table describes the impact, notes the CEQA and NEPA
27 impact determinations, describes any applicable mitigation measures, and notes any
28 remaining impacts after mitigation. All impacts, whether significant or not, are included
29 in this table.

Table 3.9-13: Summary Matrix of Potential Impacts and Mitigation Measures for Marine Transportation Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Residual Impacts after Mitigation
Proposed Project	VT-1a: Proposed project construction-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
	VT-1b: Proposed project operation-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: No impact	NEPA: No mitigation is required	NEPA: No impact
Alternative 1 – No Federal Action	VT-1a: Alternative 1 construction-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	CEQA: No impact	CEQA: No mitigation is required	CEQA: No impact
		NEPA: No impact	NEPA: No mitigation is required	NEPA: No impact
	VT-1b: Alternative 1 operation-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: No impact	NEPA: No mitigation is required	NEPA: No impact
Alternative 2 – No Project	VT-1a: Alternative 2 construction-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	CEQA: No impact	CEQA: No mitigation is required	CEQA: No impact
		NEPA: Not applicable	NEPA: Mitigation not applicable	NEPA: Not applicable
	VT-1b: Alternative 2 operation-related marine traffic would not substantially interfere with	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Residual Impacts after Mitigation
	operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	NEPA: Not applicable	NEPA: Mitigation not applicable	NEPA: Not applicable
Alternative 3 – Reduced Project: Reduced Wharf Improvements	VT-1a: Alternative 3 construction-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
	VT-1b: Alternative 3 operation-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
Alternative 4 – Reduced Project: No Backlands Improvements	VT-1a: Alternative 4 construction-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
	VT-1b: Alternative 4 operation-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
Alternative 5 – Expanded On- Dock Railyard: Wharf and Backland Improvements with an Expanded	VT-1a: Alternative 5 construction-related marine traffic would not substantially interfere with operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
	VT-1b: Alternative 5 operation-related marine traffic would not substantially interfere with	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Residual Impacts after Mitigation
TICTF	operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, Harbor, or Precautionary Area.	NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant

3.9.4.5 Mitigation Monitoring

Neither the proposed Project nor any of the alternatives would result in significant impacts on Marine Transportation. Therefore, no mitigation measures or monitoring is required.

3.9.5 Significant Unavoidable Impacts

No significant unavoidable impacts on Marine Transportation would occur during construction or operation of the proposed Project or alternatives.

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