# Chapter 5
# Cumulative Analysis

## 5.1 Introduction

This chapter evaluates the potential for the proposed Project, together with other past, present, and reasonably foreseeable future projects in the cumulative geographic scope of each resource area, to make a cumulatively considerable contribution to a significant cumulative effect. The presentation of requirements related to cumulative impact analyses and a brief description of the related projects are discussed in Sections 5.1.1 and 5.1.2, respectively. The discussion under each environmental issue area describes the potential impacts as a result of Project buildout in combination with development of reasonably foreseeable projects in the geographic area, as described in Section 5.2.

Cumulative impacts of the proposed Project, when combined with other reasonably foreseeable projects in the area, are evaluated under each resource topic in Section 5.2. A discussion of cumulative impacts for each alternative is also presented for each impact, following the cumulative analysis of the proposed Project. A description of each alternative and analysis of potential impacts is presented in Chapter 6, Analysis of Alternatives. The seven Project alternatives include:

- Alternative 1 – Reduced Project: Water Quality Improvements
- Alternative 2 – Reduced Project: Limited Demolition
- Alternative 3 – Retention of Historic Buildings
- Alternative 4 – Relocation of Historic Buildings
- Alternative 5 – Alternate Site
- Alternative 6 – No Project
- Alternative 7 – No Federal Action

### 5.1.1 Requirements for Cumulative Impact Analysis

The state CEQA Guidelines (14 CCR 15130) require a reasonable analysis of the significant cumulative impacts of a proposed Project. Cumulative impacts are defined by CEQA as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355).

Cumulative impacts are further described as follows:

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impacts from several projects are the changes in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (40 CFR 1508.7 and CEQA Guidelines, Section 15355[b]).

Furthermore, according to CEQA Guidelines Section 15130(a)(1):

> *As defined in Section 15355, a "cumulative impact" consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.*

In addition, as stated in the CEQA Guidelines, Section 15064(i)(5):

> *The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable.*

Therefore, the following cumulative impact analysis focuses on whether the impacts of the proposed Project and alternatives are cumulatively considerable within the context of impacts caused by other past, present, or future projects. The cumulative impact scenario considers other projects proposed within the area defined for each resource that would have the potential to result in a significant cumulative impact. Only those project impacts determined to be less than significant, less than significant with mitigation, or significant and unavoidable are analyzed for cumulative impacts.

For this EIR, related area projects with a potential to contribute to cumulative impacts were identified using one of two approaches: the "list" methodology or the "projection" methodology. Most of the resource areas were evaluated using a list of closely related projects that would be constructed within the spatial and temporal scope of analysis. The temporal and spatial scope of analysis varies by resource area and in some case, even by a resource area's impact threshold. The cumulative regions of influence are documented in Section 5.2 below. The list of related projects is provided in Table 5-1 in Section 5.1.2 below.

Air quality, noise, and traffic/circulation analyses use a projection or a combined list and projection approach as described below. Cumulative analysis of air quality impacts uses projections from the South Coast Air Basin 2007 AQMP and the 2008 *Multiple Air Toxics Exposure Study* (MATES II and MATES-III) (SCAQMD, 2007 and 2008). The Traffic/Circulation cumulative analysis uses future traffic growth forecasts for the area from the Southern California Association of Governments (SCAG) Regional Travel Demand Forecasting Model and the Port Travel Demand Model which are described in Section 3.12. The cumulative analysis of noise impacts uses a hybrid approach, as it relies on both the annual regional growth rates utilized for traffic (because traffic is an important contributor to noise impacts) and the list of related projects documented in Section 5.1.2.

## 5.1.2 Projects Considered in the Cumulative Analysis

### 5.1.2.1 Past Projects

This section describes past, present, and reasonably foreseeable projects in the area that affect cumulative conditions at the Port.

#### History of the Port of Los Angeles

The Port is located in the Port Complex at the southernmost point of Los Angeles County, approximately 20 miles from downtown Los Angeles. Because of its proximity to the Pacific Ocean, the Port Complex has a long history of maritime activity.

In 1822, under the newly independent Mexican government San Pedro became a robust commercial center and an attractive home for new settlers. The Mexican government granted three ranchos near the bay, Rancho San Pedro, Rancho Los Palos Verdes, and Rancho Los Cerritos. On February 2, 1848, when California came under American control, business at San Pedro Harbor was booming. It was evident, however, that the Harbor needed to be expanded to accommodate the increasing cargo volume coming into the bay for the growing population in Los Angeles. In 1906, the city annexed a 16-mile strip of land on the outskirts of San Pedro and Wilmington. The Port was officially founded in 1907 with the creation of the Los Angeles Board of Harbor Commissioners. Between 1911 and 1912, the first 8,500-foot section of the breakwater was completed, and the Main Channel was widened to 800 feet and dredged to a depth of 30 feet to accommodate the largest vessels of that era. Concurrently, Southern Pacific Railroad completed its first major wharf in San Pedro, allowing railcars to efficiently load and unload goods simultaneously. The Port continued to grow through the twentieth century.

Following World War II, the Los Angeles Harbor District launched a broad restoration program. Many of the facilities in the Harbor required maintenance that had been delayed during the war years. In recent years, the advent of containerization resulted in dramatic changes at the Port. Because of this new mode of shipping, the Port, like major new and old harbors, modernized facilities to meet the needs of the new geometry required by containerization. In addition to the new (container size and shape driven) configurations, larger cranes and concrete wharves (replacing timber) were required to handle the dramatically increased weight of cargo containers. Other major Harbor improvements included deepening the main channel to accommodate the larger container vessels entering the bay, purchasing land to expand terminals, and replacing older wharves that could not bear the increased weight of newer containers.

#### History of the Project Area and Site

The ALBS facilities have been at the present location since 1924. Most of the structures presently at the site were constructed in 1938. The facilities have supported activities such as boat construction, boat repair and maintenance, sales and service of marine and stationary engines, and accessories.

In 1903, Swedish native Al Larson established a shipyard o the east side of the main San Pedro Channel, on lands leased from the Banning family. Larson's small yard soon became a successful enterprise, building and repairing wooden fishing vessels for local fishermen. Prior to the 1910s, shipbuilding and repair operations at the Port were limited by the harbor's shallow depth. Small fishing and tugboats were built and serviced by local yards, including the ALBS, established in 1903. Dredging improvements deepened harbor waters, bringing larger vessels to the Port and providing the boatyards increased commercial opportunities. Around 1913 or 1914, the Main Channel was modified to

accommodate increasing traffic, and Larson moved his shop to the Wilmington direct waterfront, on Mormon Island. The ALBS continued to build and service fishing seiners, transport and excursion boats, yachts, and freighters at its new location.

In 1924, Larson relocated his shipyard to its existing Terminal Island location, at Berth 258. The new location, which was situated near the mouth of newly completed Fish Harbor, was approximately two acres. The Office and Workshop Building was the first building erected at the yard. Other early improvements at the site included the slipways and finger piers situated to the rear of the Office and Workshop Building.

As fishing industry business continued to accelerate through the 1920s, ALBS expanded to accommodate the increasing maritime-related industry that continued to grow at the Port. As fisherman worked at sea to catch sardines, mackerel, and tuna, fish processing plants on Terminal Island worked day and night to can and ship fish to supply domestic and world markets. Throughout this time, the ALBS was building and maintaining the fishing boat fleets of the local canneries. The ALBS continued to operate through the late 1920s and into the 1930s, with few changes at the boatyard. Larson was granted permission to extend his boat way by 75 feet in the channel at the Harbor Fish Market.

Building and repairing ships for the fishing industry continued to be a primary service of ALBS until 1941, when the U.S. Navy took over Port operations. To support the war effort, ALBS began constructing designated YMS-1 Class Auxiliary motor minesweepers for the Navy. The end of the war brought a steep decline in the shipbuilding industry and by the late the 1940s, ALBS had reduced its boatbuilding operations in order to focus on ship repairs.

Since the 1980s, ALBS has continued to improve and expand its operations. Many of the buildings and structures have been altered and repaired to keep pace with new technologies and changing environmental safety regulations. The wood docks and finger piers have been altered throughout the years to keep up with the maritime elements, and in 1983, the marina was replaced due to heavy storms that destroyed the original boat ways. Seaside Avenue was realigned in 2008 to accommodate ship repair activities at the ALBS. The new road alignment curves west, into the adjacent property bringing the Southwest Marine (former Bethlehem Shipyard) Administration Building into the current temporary ALBS parking lot and service yard.

Historical development of the Project site, the Port, and the general vicinity has had various environmental effects, which are described in individual resource analysis sections below (Section 4.2.2).

### Port Master Plan

The Project site and areas surrounding Fish Harbor are identified in the PMP as being located within Area 8: Fish Harbor (POLA, 1979). Development within Area 8 has been oriented to the commercial fishing, fish-processing industry, and marina facilities (i.e., slips and moorings). The short-term development plans for Area 8, as identified in the PMP, was for the area to continue supporting fish-processing and commercial fishing industries. Although the cannery operations were expected to remain and even expand at the time the PMP was written (1979), the last cannery closed in 2001 due to primarily economic reasons. Marina and recreational boating facilities were also planned, as long as those operations did not interfere with commercial fishing activities. The primary

short-term development, as indicated in the PMP, was primarily related to dredging activities in order to provide safer access and docking for larger commercial fishing vessels and to remove accumulated toxic materials from Fish Harbor. No long-range changes in land use were anticipated at the time, other than to accommodate commercial fishing expansion demands, particularly with an increase in commercial fishing operations.

#### 5.1.2.2 Current and Future Projects

A total of 146 present or reasonably foreseeable future projects (approved or proposed) were identified within the general vicinity of the Project that could contribute to cumulative impacts. The locations of these projects are shown in Figure 5-1. A corresponding list of the cumulative projects is provided in Table 5-1 from sources that include LAHD, the Port of Long Beach, LADOT, and the City of Los Angeles and other local jurisdictions. As discussed in Section 5.1.1 and further in the resource areas below, some resource-specific analyses use a projection approach encompassing a larger cumulative geographic scope, and for these resources, a larger set of past, present, and reasonably foreseeable future projects was included for analysis of cumulative impacts.

For the purposes of this EIR, the timeframe of current or reasonably anticipated projects extends from 2009 to 2042 (proposed Project build-out), and the vicinity is defined as the area over which effects of the proposed Project could contribute to cumulative effects. The cumulative regions of influence for individual resources are documented further in each of the resource-specific subsections in Section 5.2.

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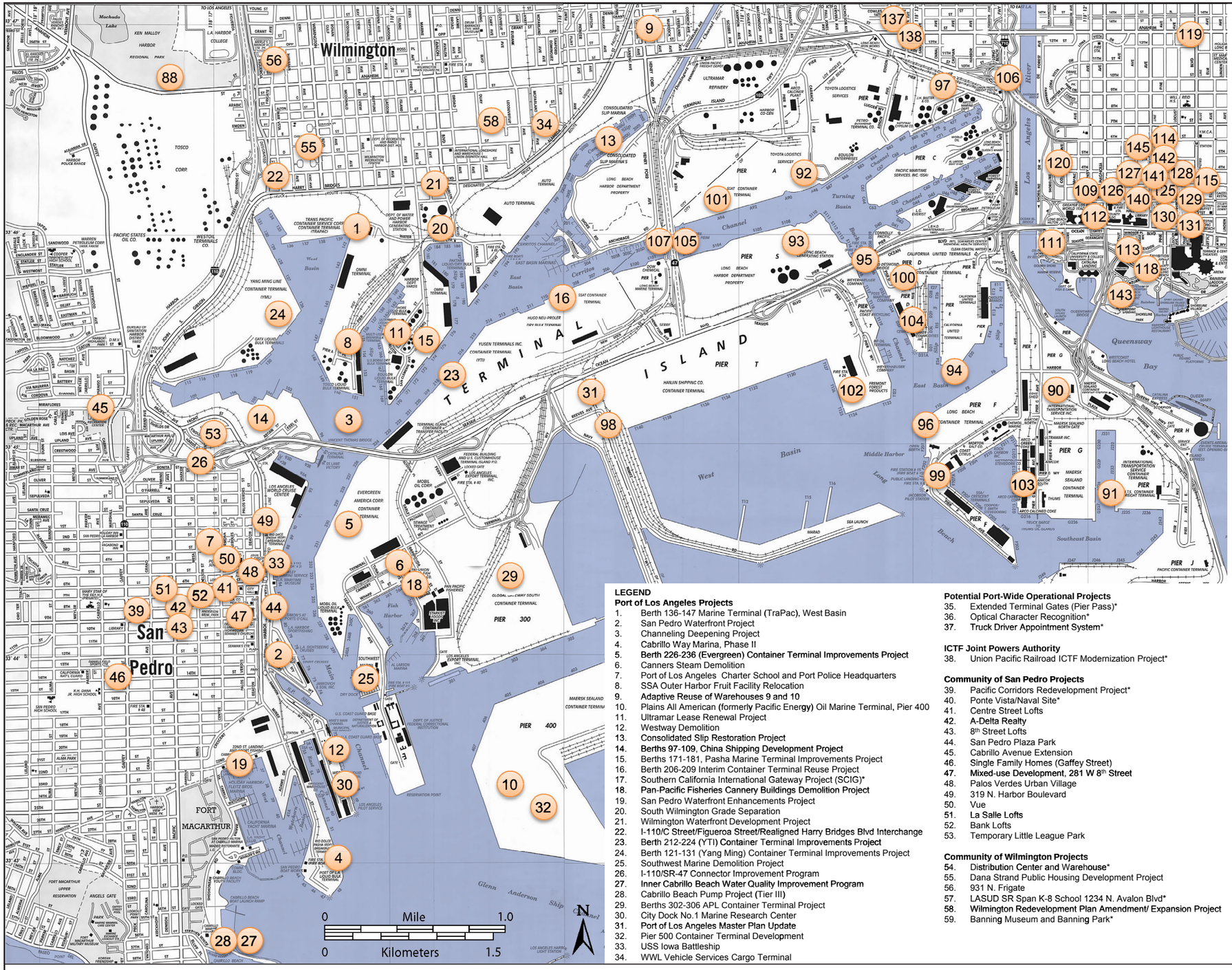


**LEGEND**

**Port of Los Angeles Projects**

1. Berth 136-147 Marine Terminal (TraPac), West Basin
2. San Pedro Waterfront Project
3. Channeling Deepening Project
4. Cabrillo Way Marina, Phase II
5. **Berth 226-236 (Evergreen) Container Terminal Improvements Project**
6. Canners Steam Demolition
7. Port of Los Angeles Charter School and Port Police Headquarters
8. SSA Outer Harbor Fruit Facility Relocation
9. Adaptive Reuse of Warehouses 9 and 10
10. Plains All American (formerly Pacific Energy) Oil Marine Terminal, Pier 400
11. Ultramar Lease Renewal Project
12. Westway Demolition
13. Consolidated Slip Restoration Project
14. **Berths 97-109, China Shipping Development Project**
15. Berths 171-181, Pasha Marine Terminal Improvements Project
16. Berth 206-209 Interim Container Terminal Reuse Project
17. Southern California International Gateway Project (SCIG)*
18. **Pan-Pacific Fisheries Cannery Buildings Demolition Project**
19. San Pedro Waterfront Enhancements Project
20. South Wilmington Grade Separation
21. Wilmington Waterfront Development Project
22. I-110/C Street/Figueroa Street/Realigned Harry Bridges Blvd Interchange
23. **Berth 212-224 (YTI) Container Terminal Improvements Project**
24. Berth 121-131 (Yang Ming) Container Terminal Improvements Project
25. Southwest Marine Demolition Project
26. I-110/SR-47 Connector Improvement Program
27. **Inner Cabrillo Beach Water Quality Improvement Program**
28. Cabrillo Beach Pump Project (Tier III)
29. Berths 302-306 APL Container Terminal Project
30. City Dock No.1 Marine Research Center
31. **Port of Los Angeles Master Plan Update**
32. Pier 500 Container Terminal Development
33. USS Iowa Battleship
34. WWL Vehicle Services Cargo Terminal

**Potential Port-Wide Operational Projects**

35. Extended Terminal Gates (Pier Pass)*
36. Optical Character Recognition*
37. Truck Driver Appointment System*

**ICTF Joint Powers Authority**

38. Union Pacific Railroad ICTF Modernization Project*

**Community of San Pedro Projects**

39. Pacific Corridors Redevelopment Project*
40. Ponte Vista/Naval Site*
41. Centre Street Lofts
42. **A-Delta Realty**
43. 8th Street Lofts
44. San Pedro Plaza Park
45. Cabrillo Avenue Extension
46. Single Family Homes (Gaffey Street)
47. **Mixed-use Development, 281 W 8th Street**
48. Palos Verdes Urban Village
49. 319 N. Harbor Boulevard
50. Vue
51. La Salle Lofts
52. Bank Lofts
53. Temporary Little League Park

**Community of Wilmington Projects**

54. Distribution Center and Warehouse*
55. Dana Strand Public Housing Development Project
56. 931 N. Frigate
57. LASUD SR Span K-8 School 1234 N. Avalon Blvd*
58. **Wilmington Redevelopment Plan Amendment/ Expansion Project**
59. Banning Museum and Banning Park*

**Projects in Harbor City, Lomita, and Torrance**

60. Harbor City Child Development Center*
61. Kaiser Permanente South Bay Master Plan*
62. Ponte Vista, 26900 Western Avenue (near Green Hills Park), Lomita*
63. 2244 Pacific Coast Highway (new address: 25820 Lucille), Lomita*
64. 25316 Ebony Lane, Lomita*
65. 25819-25 Eshelman Avenue, Lomita*
66. 262nd/Western, Lomita*
67. 25829-25837 Eshelman Ave., Lomita*
68. Sepulveda Industrial Park, Torrance*
69. Hasan Ud-Din Hashmi 1918 Artesia Blvd.,Torrance*
70. Dan Withee 24510 Hawthorne Blvd., Torrance*
71. Sunrise Senior Living 25535 Hawthorne Blvd., Torrance*
72. Capellino & Associates 1104 Sartori Ave., Torrance*
73. Linda Francis 18900 Hawthorne Blvd., Torrance*
74. Dean & Jan Thomas 3525 Maricopa St, Torrance*
75. Dave O. Roberts 435 Maples Ave., Torrance*
76. Imperial Investment & Development 2433 Moreton St., Torrance*
77. Torrance RF, L.L.C. 18203 Western Avenue, Torrance*
78. Continental Development Corp. 23248 Hawthorne Blvd., Torrance*
79. Charles Belak-Berger 3720 Pacific Coast Highway, Torrance*
80. BP West Coast Products 18180 Prairie Avenue, Torrance*
81. Graceway Church 431 Madrid Avenue, Torrance*
82. Providence Health System 5215 Torrance Blvd., Torrance*
83. Torrance Memorial Medical Center, 3330 Lomita Blvd, Torrance*
84. Chuck Stringfield 19701 Mariner Ave., Torrance*
85. Gospel Venture International Church 17811 Western Avenue, Torrance*
86. Continental Development 2843 Lomita Boulevard, Torrance*
87. Mark Sachs 2909 Pacific Coast Hwy. Torrance*
88. Wilmington Drain Multi-Use and Machado Lake Ecosystem Rehabilitation Project, Harbor City/Lomita
89. Rockefeller Group Professional Center Development*

**Port of Long Beach Projects**

90. Middle Harbor Terminal Redevelopment, Port of Long Beach
91. Piers G & J Terminal Redevelopment Project, Port of Long Beach
92. Pier A East, Port of Long Beach
93. **Pier S Marine Terminal, Port of Long Beach**
94. Administration Building and Maintenance Facility Replacement Project
95. Gerald Desmond Bridge Replacement Project, Port of Long Beach and Caltrans/FHWA
96. Chemoil Marine Terminal, Tank Installation, Port of Long Beach
97. Pier B Rail Yard Expansion
98. **Terminal Island Rail Projects**
99. Mitsubishi Cement Corporation Facility Modifications
100. Polaris Aggregate Terminal
101. Pier A West Remediation Project
102. **Total Terminal International Grain Export Terminal Installation Project**
103. Sulex Demolition Project
104. Cemera Long Beach Aggregate Terminal

**ACTA and Caltrans Projects**

105. **Schuyler Heim Bridge Replacement and State Route (SR) 47 Terminal Island Expressway**
106. I-710 (Long Beach Freeway) Major Corridor Study
107. Cerritos Channel Bridge

**City of Long Beach Projects**

108. Shoreline Gateway Project*
109. West Gateway Redevelopment Project
110. 2nd+PCH*
111. **Golden Shore Master Plan**
112. Press-Telegram Mixed Use Development
113. Sierra Hotel Project
114. Long Beach Downtown Plan
115. Art Exchange
116. **North Village Center***
117. Kroc Community Center*
118. Hotel Sierra, 290 Bay St
119. 1235 Long Beach Blvd. Mixed-Use Project
120. **Douglas Park Rezone Project***
121. Ocean Blvd. Project*
122. Drake/Chavez Park Expansion*
123. Poly Gateway Project, Pacific Coast Highway and Martin Luther King Jr. Avenue*
124. **15th Street and Alamitos Avenue Open Space Development and Intersection Improvements***
125. **WPA Mosaic Open Space Development**
126. Lyon West Gateway Residential Development, Broadway at Magnolia Avenue and 3rd Street
127. Pine – Pacific, bounded by Pine and Pacific Avenues, and 3rd and 4th Streets
128. Lofts at 3rd and Promenade
129. **Broadway Block Development, Broadway, Long Beach Boulevard, 3rd street, and Elm Avenue**
130. Long Beach Transit/Visitor Information Center, downtown Long Beach
131. Hotel Esterel, Promenade at Broadway
132. Promenade Master Plan, between Shoreline Drive and 5th Stre
133. Admiral Kidd Park Expansion Site, Santa Fe at Willard*
134. **Pacific Coast Highway Streetscape Improvement***
135. Everbright Paper Recycling Center*
136. Redbarn Pet Products*
137. Smith-Co Construction
138. J.C.D.S Properties – Sudduth Tire
139. Westside Storm Drain Improvement Project*
140. 250 Pacific Avenue
141. Acres of Books
142. 495 The Promenade North
143. **100 Aquarium Way**
144. 2010 Ocean Blvd.*
145. 433 Pine Ave.
146. 600 E. Broadway*

* Project not shown on figure because it is located beyond the extent of the map.

Base map source: California State Automobile Association 2005.

CDM Smith

**Port of Los Angeles**

***Al Larson Boat Shop Improvement Project***

**Related and Cumulative Projects**

**Figure 5-1**

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**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| **Port of Los Angeles Projects** | | | |
| 1 | Berth 136-147 Marine Terminal, West Basin | Element of the West Basin Transportation Improvement Projects. Expansion and redevelopment of the TraPac Marine Terminal to 243 acres, including improvement of Harry Bridges Boulevard and a 30-acre landscaped area, relocation of an existing railyard and construction of a new on-dock railyard, and reconfiguration of wharves and backlands (includes filling of the Northwest Slip, dredging, and construction of new wharves). | The LAHC certified the EIR and approved the project on December 6, 2007. Construction started in 2009 and ongoing through 2015. |
| 2 | San Pedro Waterfront Project | The "San Pedro Waterfront" Project is a 5- to 7-year plan to develop along the west side of the Main Channel, from the Vincent Thomas Bridge to the 22nd Street Landing Area Parcel up to and including Crescent Avenue. Key components of the project include construction of a North Harbor Promenade, construction of a Downtown Harbor Promenade, construction of a Downtown Water Feature, enhancements to the existing John S. Gibson Park, construction of a Town Square at the foot of 6th Street, construction of a 7th Street Pier, construction of a Ports O' Call Promenade, development of California Coastal Trail along the waterfront, construction of additional cruise terminal facilities, construction of a Ralph J. Scott Historic Fireboat Display, relocation of the SS Lane Victory, extension of the Red Car line, and related parking improvements. | The LAHC certified the EIR and approved the project on September 29, 2009. Construction expected 2012-2020. |
| 3 | Channel Deepening Project | Dredging and sediment disposal. This project deepened the Port of Los Angeles Main Channel to a maximum depth of -53 ft mean lower low water (MLLW; lesser depths are considered as project alternatives) by removing between approximately 3.94 million and 8.5 million cubic yards of sediments. The sediments were disposed at several sites for up to 151 acres (61 hectares) of landfill. The EIR/EIS certified for the project identified significant biology, air, and noise impacts. A Supplemental EIS/EIR is being prepared for new fill locations. The Additional Disposal Capacity Project would provide approximately 3 million cubic yards of additional disposal capacity needed to complete the Channel Deepening Project and maximize beneficial use of dredged material by constructing lands for eventual terminal development and provide environmental enhancements at various locations in the Port of Los Angeles. | The LAHC certified the EIR and approved the project on April 29, 2009. Construction expected 2010-2012. Completion set for 2013. |
| 4 | Cabrillo Way Marina, Phase II, | Redevelopment of the old marinas in the Watchorn Basin and development of the backland areas for a variety of commercial and recreational uses. | EIR certified December 2, 2003. Construction complete. |
| 5 | Berth 226-236 | Proposed redevelopment of existing container terminal, including improvements | On hold. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| | (Evergreen) Container Terminal Improvements Project | to wharves, adjacent backland, crane rails, lighting, utilities, new gate complex, grade crossings and modification of adjacent roadways and railroad tracks. | |
| 6 | Canners Steam Remediation | Remediation of the former Canner's Steam Plant in the Fish Harbor area of the Port of Los Angeles. | On hold. |
| 7 | Port of Los Angeles Charter School and Port Police Headquarters, San Pedro | Proposal to lease property for the Port of Los Angeles Charter School and to construct a Port Police Headquarters and office. 330 S. Centre Street, San Pedro. | Completed. |
| 8 | SSA Outer Harbor Fruit Facility Relocation | Proposal to relocate the existing fruit import facility at 22nd and Miner to Berth 153. | On hold. |
| 9 | Adaptive Reuse of Warehouses 9 and 10 | Adaptive reuse of Warehouses 9 and 10 for visitor-serving uses to complement recreational activity at adjacent 22nd Street Park. Proposal to lease property to Crafted at the Port of Los Angeles. | Addendum to San Pedro Waterfront EIR completed. Construction expected 2012- 2013. |
| 10 | Plains All American (formerly Pacific Energy) Oil Marine Terminal, Pier 400 | Proposal to construct a Crude Oil Receiving Facility on Pier 400 with tanks on Terminal Island and other locations on Port property, with the preferred location being the former LAXT terminal, as well as construct new pipelines between Berth 408, storage tanks, and existing pipeline systems. | The LAHC certified the EIR and approved the project on November 20, 2008. Construction expected 2012-2014. |
| 11 | Ultramar Lease Renewal Project | Proposal to renew the lease between the Port of Los Angeles and Ultramar Inc., for continued operation of the marine terminal facilities at Berths 163-164, as well as associated tank farms and pipelines. Project includes upgrades to existing facilities to increase the proposed minimum throughput to 10 million barrels per year (mby), compared to the existing 7.5 mby minimum. | On hold. |
| 12 | Westway Demolition | Decommissioning of the Westway Terminal along the Main Channel (Berths 70-71). Work includes decommissioning and removing 136 storage tanks with total capacity of 593,000 barrels. | Remedial planning underway. Surface demolition will start in 2012. |
| 13 | Consolidated Slip Restoration Project | Remediation of contaminated sediment at Consolidated Slip at Port of Los Angeles. Remediation may include capping sediment or removal/disposal to an appropriate facility. Work includes capping and/or treatment of approximately 30,000 cubic yards of contaminated sediments. | Remedial actions are being evaluated in conjunction with Los Angeles RWQCB and USEPA. |
| 14 | Berths 97-109, China | Development of the China Shipping Terminal Phase I, II, and III including wharf | The LAHC certified the EIR and |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| | Shipping Development Project | construction, landfill and terminal construction and backland development. | approved the project on December 8, 2009. Construction started in 2009 and ongoing through 2013. |
| 15 | Berths 171-181, Pasha Marine Terminal Improvements Project | Redevelopment of existing facilities at Berths 171-181 as an omni (multi-use) facility. | Project EIR on hold. |
| 16 | Berth 206-209 Interim Container Terminal Reuse Project | Proposal to allow interim reuse of former Matson Terminal as a medium-density container and breakbulk terminal. The terminal would accommodate one vessel and utilize four cranes. | Draft EIS/EIR pending. Construction anticipated in 2013 - 2014. |
| 17 | Southern California International Gateway Project (SCIG) | Construction and operation of a 157-acre dock railyard intermodal container transfer facility (ICTF) and various associated components, including the relocation of an existing rail operation. | DEIR released September 2011. Construction anticipated 2013-2015. |
| 18 | Pan-Pacific Fisheries Cannery Buildings Demolition Project, | Demolition of two unused buildings and other small accessory structures at the former Pan-Pacific Cannery in the Fish Harbor area of the Port of Los Angeles (POLA). | NOP released October 2005. Draft EIR released July 2006. Final EIR on hold. |
| 19 | San Pedro Waterfront Enhancements Project | Project includes creation of 16 acres of public open space at 22nd Street Park, pedestrian and landscaping improvements at Cabrillo Beach, and pedestrian access, landscaping and public art at the SP Slip. | MND approved in April 2006. Construction from 2007 to 2012. |
| 20 | South Wilmington Grade Separation | An elevated grade separation would be constructed along a portion of Fries Avenue or Marine Avenue, over the existing rail line tracks, to eliminate vehicular traffic delays that would otherwise be caused by trains using the existing rail line and the new ICTF railyard. The elevated grade would include a connection onto Water Street. There would be a minimum 24.5-foot clearance for rail cars traveling under the grade separation. | Construction anticipated 2012 – 2014. |
| 21 | Wilmington Waterfront Development Project | Project includes light-industrial, commercial, and public open space uses within a 90-acre site. Features include a 10-acre elevated park over active rail lines, 250-foot observation tower, and a Wilmington waterfront promenade near Banning's Landing. | The LAHC certified the EIR and approved the project on June 18, 2009. Construction expected 2016-2020. |
| 22 | I-110/C Street/ | Consolidation of the following intersections: I-110/C Street/Figueroa Street | MND under preparation. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| | Figueroa Street/ Realigned Harry Bridges Blvd Interchange | interchange intersection and the intersection of Harry Bridges Boulevard-Alameda Street/John S. Gibson Boulevard/Figueroa Street.<br>Construction of a new, northbound I-110 off-ramp with a direct connector ramp to eastbound Harry Bridges Boulevard-Alameda Street (i.e., a new, free-flow, northbound off-ramp to eastbound Harry Bridges-Alameda Street). | Construction expected 2013-2016. |
| 23 | Berth 212-224 (YTI) Container Terminal Improvements Project | Wharf modifications at the YTI Marine Terminal Project involves wharf upgrades and backland reconfiguration, including new buildings. | EIR/EIS on hold. |
| 24 | Berth 121-131 (Yang Ming) Container Terminal Improvements Project | Reconfiguration of wharves and backlands. Expansion and redevelopment of the Yang Ming Terminal. | EIR/EIS to be prepared. |
| 25 | Southwest Marine Demolition Project | Demolition of buildings and other small accessory structures at the Southwest Marine Shipyard. | Draft EIR released September 2006. Final EIR on hold. |
| 26 | I-110/SR-47 Connector Improvement Project | This project will eliminate an existing weaving condition of slow uphill moving trucks and fast downhill moving vehicles with the addition of a lane on the westbound to northbound SR 47/I-110 connector. This additional lane will continue through the I-110 Off-Ramp at John S. Gibson Boulevard where the intersection will be widened to better facilitate truck turning movements and accommodate additional southbound left turn and northbound right turn lanes. | MND released August 2011. Construction expected 2013-2016. |
| 27 | Inner Cabrillo Beach Water Quality Improvement Program | Phased improvements at Cabrillo Beach to reduce the wet and dry weather high concentrations of bacteria. Includes sewer and storm drain work, sand replacement, and bird excluders. | Construction complete. |
| 28 | Cabrillo Beach Pump Project (Tier III) | Phased improvements at Cabrillo Beach to reduce the wet and dry weather high concentrations of bacteria circulation improvements. | On hold. |
| 29 | Berth 302-306 (APL) Container Terminal Project | This project would include terminal and wharf improvements to the existing 291-acre APL Terminal on Pier 300, including new cranes, development of additional backlands area, wharf extension, a new berth on the east side of Pier 300, new terminal facilities, and other minor upland improvements (i.e., utility infrastructure). The terminal expansion area would include the 41-acre fill area that was completed as part of the Channel Deepening Project (number 3 above), and other adjacent parcels (15 acres). Under this project, the APL Terminal | Project EIR/EIS under preparation. DEIR/EIS released December 2011. Construction anticipated 2012-2014. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| | | would operate approximately 347 acres. These improvements would facilitate the handling of cargo throughput at the APL Terminal through 2027, which is projected to be 3.2 million TEUs. | |
| 30 | City Dock No. 1 Marine Research Center | Adaptive reuse of warehouses at Berths 57 and Berths 58-60 on a 28-acre site for use as an urban marine research center. Includes future develop of the Westways terminal, including construction of a 50,000 sq ft building and a 80,000 sq ft seawater wave tank. | EIR under preparation. Construction anticipated 2013-2025. |
| 31 | Port of Los Angeles Master Plan Update | Redevelopment of Fish Harbor, redevelopment of Terminal Island and consideration of on-dock rail expansion, and consolidation of San Pedro and Wilmington Waterfront districts. | Conceptual planning |
| 32 | Pier 500 Container Terminal Development | Creation of up to 200-acre fill to support backland and new wharfs for the operation of a new container terminal. | Conceptual planning |
| 33 | USS Iowa Battleship | Permanent mooring of USS Iowa Navy Battleship at Berth 87 and construction of landside museum and surface parking to support 371,000 annual visitors. | NOP/Initial Study released August 2011. |
| 34 | WWL Vehicle Services Cargo Terminal | Expansion of vehicle offloading processing and operations, including cargo increase up to 220,000 vehicles per year and construction of two additional rail loading tracks. | Conceptual planning |
| Various | Maintenance Dredging | Maintenance dredging is the routine removal of accumulated sediment from channel beds to maintain the design depths of navigation channels, harbors, marinas, boat launches, and port facilities. This is conducted regularly for navigational purposes (at least once every five years). | Continuous, but intermittent on average every 3-5 years. |
| Eight cargo terminals and World Cruise Center | Alternative Maritime Power (AMP™) | AMP™ systems (also known as "cold-ironing") at the Port include a shore side power source, a conversion process to transform the shore side power voltage to match the vessel power systems, and a container vessel that is fitted with the appropriate technology to utilize electrical power while at dock. | Construction anticipated to be complete by 2014. |
| **Port of Los Angeles and/or Port of Long Beach Potential Port-Wide Operational Projects** | | | |
| 35 | Extended Terminal Gates (Pier Pass) | POLA and POLB program to use economic incentives to encourage cargo owners to use terminal gates during off-peak hours. | Program in Progress |
| 36 | Optical Character | Ports terminals have implemented OCR technology, which eliminates the need to | Conceptual planning. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| | Recognition | type container numbers in the computer system. This expedites the truck driver through terminal gates. | |
| 37 | Truck Driver Appointment System | Appointment system that provides a pre-notification to terminals regarding which containers are planned to be picked up. | Implemented. |
| **ICTF Joint Powers Authority** | | | |
| 38 | Union Pacific Railroad ICTF Modernization Project | UP proposal to modernize existing intermodal yard four miles from the Port. | Project EIR under preparation. DEIR expected Spring 2012. |
| **Community of San Pedro Projects** | | | |
| 39 | Pacific Corridors Redevelopment Project, San Pedro | Development of commercial/retail, manufacturing, and residential components. Construction underway of four housing developments and Welcome Park. | Project underway. Estimated 2032 completion year according to Community Redevelopment Agency of Los Angeles. |
| 40 | Ponte Vista/Naval Site | Construct 1,135 residential units, including single family homes, apartments, and condominiums, and open space. | NOP released in October 2010. |
| 41 | Centre Street Lofts | Construct residential units and ground floor commercial at 285 W. 6th Street | Construction Completed |
| 42 | A-Delta Realty | Artist's Lofts and retail space at 731-741 S. Pacific Ave. | Construction completed. |
| 43 | 8th Street Lofts | Loft apartments at southeast corner of 8th Street and Pacific Ave. | Construction completed. |
| 44 | San Pedro Plaza Park | Outdoor improvements including minor grading, hillside slope repair, small retaining walls, view deck, fencing, gates, security lighting, seating areas, signage, landscaping, and irrigation. | Construction is expected to begin in June 2012, and to be completed by June 2013. |
| 45 | Cabrillo Avenue Extension | This project will widen Cabrillo Avenue to 36-ft of roadway and 9-ft of sidewalk from Miraflores Avenue to existing alley. It will also widen the existing alley to 25-ft and connect it to Channel Street by acquiring right-of-way. | Construction is expected to begin in January 2012, and to be completed by June 2012. |
| 46 | Single Family Homes (Gaffey Street) | Construct 135 single-family homes. About 2 acres. 1427 N. Gaffey Street (at Basin Street), San Pedro. | Project approved; construction pending. |
| 47 | Mixed-use development, 281 W 8th Street | Construct 72 condominiums and 7,000 sq ft retail. 281 West 8th Street (near Centre Street), San Pedro. | Under construction according to City of Los Angeles Zoning Information and Map Access System (ZIMAS). |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| 48 | Palos Verdes Urban Village | Construct 251 condominiums and 4,000 sq ft retail space. 550 South Palos Verdes Street, San Pedro. | No construction has started. |
| 49 | 319 N. Harbor Blvd | Construction of 94 unit residential condominiums. | Construction has not started according to LADOT Planning Department. |
| 50 | Vue | Construct 220 housing unit apartments. 255 5th Street, San Pedro (near Centre Street). | Construction completed. |
| 51 | La Salle Lofts | Construct 26 units with ground floor commercial at 255 W. 7th Street | Construction completed. |
| 52 | Bank Lofts | 89-unit apartment complex with ground floor commercial, 407th 7th Street | Construction completed. |
| 53 | Temporary Little League Park | Construction of temporary baseball fields for the Eastview Little League at Knoll Hill. | Construction completed |
| **Community of Wilmington Projects** | | | |
| 54 | Distribution center and warehouse | A 135,000 sq ft distribution center and warehouse on 240,000 sq ft lot w/47 parking spaces at 755 East L Street, (at McFarland Avenue) in Wilmington. | No construction has started; lot is vacant and bare. LADOT Planning Department has no estimated completion year. |
| 55 | Dana Strand Public Housing Redevelopment Project | 413 units of mixed-income affordable housing to be constructed in four phases: Phase I - 120 rental units; Phase II - 116 rental units; Phase III - 100 senior units; Phase IV - 77 single family homes. The plans also include a day care center, lifelong learning center, parks and landscaped open space. | Phases I and II have been completed and are being leased Phases III and IV are currently under development. |
| 56 | 931 N. Frigate | Private school expansion for 72 student increase for a total of 350 students. | Construction has not started according to LADOT Planning Department. |
| 57 | LASUD SR Span K-8 School. 1234 N. Avalon Blvd | Construction of 1278 student elementary school | Construction has not started according to LADOT Planning Department. |
| 58 | Wilmington Redevelopment Plan Amendment/ Expansion Project, | The existing Wilmington Industrial Park would be expanded by an additional 2,487 acres, for a total of approximately 2,719 acres. Under the probable maximum level of development, the overall project area could support up approximately 7,326 residential units (primarily multi-family; zone changes under | NOP for Program EIR out for public review August 2010. Currently on hold. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| | Wilmington | the Plan would permit multi-use and higher density residential development). In addition to the residential development, the Project could accommodate up to approximately 207 acres (9 million sq ft) of commercial development and up to 333 acres (14.5 million sq ft) of industrial development. | |
| 59 | Banning Museum and Banning Park | *Banning Museum:* Refurbishment of museum buildings and improvements to the open space/garden, including waterproofing Banning Museum, relocating an existing LADWP Transformer, rehabilitating the walkways, and Rose garden and museum landscaping.<br>*Banning Park:* Improvements to Athletic Fields, Recreation Center and Walking Paths, including: rooftop HVAC replacement to recreation center; walkway resurfacing around the entire park (except within the Banning Residence Museum's perimeter wrought iron fencing); and door replacement to the recreation center; and, reconstruct the existing baseball field. | Construction began in November 2010 and is expected to be completed by December 2012. |
| **Projects in Harbor City, Lomita, and Torrance** | | | |
| 60 | Harbor City Child Development Center | Conditional use permit to open 50-student preschool at existing church building (25000 South Normandie Avenue, Harbor City, at Lomita Boulevard). | Construction has not started according to LADOT Planning Department. |
| 61 | Kaiser Permanente South Bay Master Plan | Construct 303,000 sq ft medical office building, 42,500 sq ft records center/office/ warehouse, 260 hospital beds. 25825 Vermont Street, Harbor City (at Pacific Coast Highway). | In construction. |
| 62 | Ponte Vista, 26900 Western Avenue (near Green Hills Park), Lomita | Construct 1,950-unit for-sale stacked townhomes and condominiums including senior housing. Approximately 40 percent of the Project's post-development acreage would consist of landscaped common area. Rolling Hills Prep School being developed in an adjacent lot. | FEIR issued June 2008. LADOT Planning Department reports estimated 2012 completion year. |
| 63 | 2244 Pacific Coast Highway (new address: 25820 Lucille), Lomita | A request for a Site Plan Review to construct a new retail commercial building. | In plan check as of November 2009. |
| 64 | 25316 Ebony Lane, Lomita | A request to construct 16 detached senior housing units. | In plan check. |
| 65 | 25819-25 Eshelman Avenue, Lomita | Proposed 20-unit senior housing development . | In plan check. |
| 66 | 262nd/Western, | Construct an 11,100-square ft. office building on the southeast corner of Western | Construction pending. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| | Lomita | Avenue and 262nd Street. | |
| 67 | 25829-25837 Eshelman Ave., Lomita | Construct 16 new condominium units. | In plan check. |
| 68 | Sepulveda Industrial Park, Torrance | Construct 154,105-sqft industrial park (6 lots). Sepulveda Industrial Park (TT65665) 1309 Sepulveda Boulevard, Torrance (near Normandie Avenue). | No construction started. LADOT Planning Department has no estimated completion year. |
| 69 | Hasan Ud-Din Hashmi 1918 Artesia Blvd.,Torrance | Remodel/demolition of certain existing structures and the construction of a new 23,914 sq ft worship building, covered patio & outdoor covered lobby | Construction underway (soil contamination issues). |
| 70 | Dan Withee 24510 Hawthorne Blvd., Torrance | Construction of mixed-use development consisting of two-story commercial office, restaurant building, and 14 attached \residential condominium units | Under construction. |
| 71 | Sunrise Senior Living 25535 Hawthorne Blvd., Torrance | Operation of an assisted living facility | Building permit issued on March 2008. |
| 72 | Capellino & Associates 1104 Sartori Ave., Torrance | Construction of professional office condominium development | Under construction. |
| 73 | Linda Francis 18900 Hawthorne Blvd., Torrance | Operation of new automobile sales & repair facility (MINI Cooper) | Under construction. |
| 74 | Dean & Jan Thomas 3525 Maricopa St, Torrance | Construction of 12 attached condominium Units | Construction pending |
| 75 | Dave O. Roberts 435 Maple Ave., Torrance | Construction of two, one-story industrial buildings exceeding 15,000 sq ft | Construction pending. |
| 76 | Imperial Investment & Development 2433 Moreton St., Torrance | Construction and operation of 27,000 sq ft full-service spa | Construction pending. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| 77 | Torrance RF, L.L.C. 18203 Western Avenue, Torrance | Construction of new restaurant/retail/commercial building | Construction pending. |
| 78 | Continental Development Corp. 23248 Hawthorne Blvd., Torrance | Construction of a new retail store | Construction pending. |
| 79 | Charles Belak-Berger 3720 Pacific Coast Highway, Torrance | Construction of new 20,300 sq ft and commercial center with 18,688 sq ft subterranean parking structure | Construction pending. |
| 80 | BP West Coast Products, LLC 18180 Prairie Avenue, Torrance | Construction of new service station and 2,300 sq ft convenience store with off-sale beer & wine | Construction pending. |
| 81 | Graceway Church 431 Madrid Avenue, Torrance | Conversion of an industrial building for the operation of a church with shared parking | Construction pending. |
| 82 | Providence Health System 5215 Torrance Blvd., Torrance | Construction of 2, 3-story medical office buildings & 2, 3-story parking structures | Construction pending. |
| 83 | Torrance Memorial Medical Center, 3330 Lomita Blvd, Torrance | Construction of a new 7-story hospital tower & the removal of an existing medical office condominium building | Construction pending |
| 84 | Chuck Stringfield 19701 Mariner Ave., Torrance | Conversion of two industrial buildings to industrial condominiums | Construction pending. |
| 85 | Gospel Venture International Church 17811 Western Avenue, Torrance | Conversion of existing industrial building for operation as a church | Construction pending. |
| 86 | Continental Development 2843 Lomita Boulevard, Torrance | Construction of 25,000 sq ft medical office building to replace existing manufacturing building | Construction pending. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| 87 | Mark Sachs 2909 Pacific Coast Hwy. Torrance | Construction of a new 16,978 sq ft automobile dealership showroom facility | Application approved on November 2009. |
| 88 | Wilmington Drain Multi-Use and Machado Lake Ecosystem Rehabilitation Project, Harbor City/Lomita | The project consists of two components: 1) Wilmington Drain Multi-Use; and, 2) Machado Lake Ecosystem Rehabilitation. Wilmington Drain improvements include dredging, channel and bank stabilization, habitat and park design, and site-design and structural BMPs. Improvements to Machado Lake (and Harbor Regional Park) would include habitat and park design enhancements, site-design and structural BMPs, lake rehabilitation (i.e., water quality enhancements), and miscellaneous recreational improvements. | Notice of Determination was filed in September 28, 2010. Construction is expected to begin late 2011 and through 2014. |
| 89 | Rockefeller Group Professional Center Development | Construction of a 351,200 sq ft medical/office and professional building, and light industrial condominium buildings. The project would be constructed over two phases. | FEIR completed February 2010. Phase I construction is completed, and Phase II is expected to be completed by late 2011. |
| **Port of Long Beach Projects** | | | |
| 90 | Middle Harbor Terminal Redevelopment, Port of Long Beach | The project consolidates two existing container terminals into one 345-acre terminal. Construction includes approximately 54.6 acres of landfill, dredging, and wharf construction; construction of an intermodal railyard; and reconstruction of terminal buildings. | Approved project. Construction underway 2010-2019. |
| 91 | Piers G & J Terminal Redevelopment Project, Port of Long Beach | Redevelopment of two existing marine container terminals into one terminal in the Southeast Harbor Planning District area. The project will develop a marine terminal of up to 315 acres by consolidating portions of two existing terminals on Piers G and J and several surrounding parcels. Construction will occur in four phases and will include approximately 53 acres of landfills, dredging, concrete wharves, rock dikes, and road and railway improvements. | Approved project. Construction underway (2005-2015). |
| 92 | Pier A East, Port of Long Beach | Redevelopment of 32 acres of existing auto storage area into container terminal uses. | Conceptual planning. |
| 93 | Pier S Marine Terminal, Port of Long Beach | Development of a 150-acre container terminal on Pier S and construction of navigational safety improvements to the Back Channel. | EIS/EIR released September 2011. |
| 94 | Administration Building Replacement Project, Port of Long Beach | Replacement of the existing Port Administration Building and Maintenance Facility with a new facility on an adjacent site on Pier G. | Approved project. Construction underway 2009-2012. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| 95 | Gerald Desmond Bridge Replacement Project, Port of Long Beach and Caltrans/FHWA | Replacement of the existing 4-lane Gerald Desmond highway bridge over the Port of Long Beach Back Channel with a new 6- to 8-lane bridge. | Final EIR/EA certified in July 2010. Construction anticipated to being in 2012. |
| 96 | Chemoil Marine Terminal, Tank Installation, Port of Long Beach | Construction of two petroleum storage tanks and associated relocation of utilities and reconfiguration of adjoining marine terminal uses between Berths F210 and F211 on Pier F. | EIR on hold. |
| 97 | Pier B Railyard Expansion | Expansion of the existing Pier B Railyard in two phases, including realignment of the adjacent Pier B Street and utility relocation. | EIR being prepared. |
| 98 | Terminal Island Rail Projects | Construct rail improvements on Terminal Island, including a grade separation at Reeves Avenue and additional storage tracks. | EIR being prepared (2012-2015). |
| 99 | Mitsubishi Cement Corporation Facility Modifications | Facility modification, including the addition of a catalytic control system, construction of four additional cement storage silos, and upgrading existing cement unloading equipment on Pier F. | NOP/IS released in August 2011. |
| 100 | Polaris Aggregate Terminal | Construction and operation of a sand, gravel, and aggregate receiving, storage, and distribution terminal on Pier D. | NOP being prepared. |
| 101 | Pier A West Remediation Project, Port of Long Beach | Remediation of approximately 90 acres of oil production land, including remediation of soil and groundwater contamination, relocation of oil wells, filling, and paving. | Cleanup complete (2008-2009). |
| 102 | Total Terminal International Grain Export Terminal Installation Project | Construction and operation of a grain transloading facility on a vacant 10-acre site on Pier T adjacent to the existing Hanjin container terminal. It would utilize existing infrastructure to the extent feasible and require no changes to shipping vessel operations. | NOP/IS released in August 2011. |
| 103 | Sulex Demolition Project | Demolition of a sulfur export facility on Pier G to fulfill the conditions of lease termination. No future use for the site is identified. | NOP/IS released in December 2010. |
| 104 | Cemera Long Beach Aggregate Terminal | Construction and operation of a sand, gravel, and aggregate receiving, storage, and distribution terminal on Pier D. | EIR on hold. |
| **Alameda Corridor Transportation Authority and Caltrans Projects** | | | |
| 105 | Schuyler Heim Bridge Replacement and State Route (SR) 47 Terminal Island Expressway | ACTA/Caltrans project to replace the Schuyler Heim Bridge with a fixed structure and improve the SR-47/Henry Ford Avenue/Alameda Street transportation corridor by constructing an elevated expressway from the Heim Bridge to SR 1 (Pacific Coast Highway). | EIR/EIS approved; construction delayed/start date undetermined. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| 106 | I-710 (Long Beach Freeway) Major Corridor Study | Develop multi-modal, timely, cost-effective transportation solutions to traffic congestion and other mobility problems along approximately 18 miles of the I-710, between the Port Complex ports and State Route 60. Early Action Projects include:<br>a) Port Terminus: Reconfiguration of SR 1 (Pacific Coast Highway) and Anaheim Interchange, and expansion of the open/green space at Cesar Chavez Park.<br>b) Mid Corridor Interchange: Reconfigurations Project for Firestone Boulevard Interchange and Atlantic/Bandini Interchange. | NOP/NOI released August 2008. DEIR/EIS under preparation. |
| 107 | Cerritos Channel Bridge | New rail bridge adjacent to existing Badger Avenue Rail Bridge | Project delayed - start date undetermined. |
| **City of Long Beach Projects** | | | |
| 108 | Shoreline Gateway Project | Mixed-use development of a 22-story residential tower with retail, commercial, and office uses located north of Ocean Boulevard, between Atlantic Avenue and Alamitos Avenue, a 15- to 19-story stepped slab building west of the existing Lime Avenue and Ocean Boulevard intersection, and a 10-story building. | Final EIR certified in September 2006. Entitlements granted. City Planning Department has no estimated construction start and completion year. |
| 109 | West Gateway Redevelopment Project | Redevelop nine existing parcels, including apartments, condominiums, and retail, on Broadway between Chestnut and Maine. | Under construction. |
| 110 | 2nd and PCH | The proposed project located at 6400 E. Pacific Coast Highway (PCH) would include the demolition of existing on-site uses and would provide new residential, office, retail, and potential hotel uses, along with associated parking and open space. | DEIR was released on April 19, 2010. In process for entitlement. City Planning Department has no estimated construction start and completion year. |
| 111 | Golden Shore Master Plan | The proposed project would provide new residential, office, retail, and potential hotel uses, along with associated parking and open space. | Final EIR was released on January 2010. In process for entitlement. City Planning Department has no estimated construction start and completion year. |
| 112 | Press-Telegram Mixed Use Development | Construction of two high-rise buildings on the 2.5-acre Press-Telegram site. Each building would be 22 stories and 250 ft in height. The project would be a mixed-use development with 542 residential units, and 32,300 sq ft of office and institutional space. | Draft EIR prepared August 2006. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| | | | |
| 113 | Sierra Hotel Project | Development of 91,304 sqe ft, 7-story hotel structure with 140 rooms. Parking will be provided in the multi-level parking structure located across the street at the southwest corner of Cedar Avenue and Seaside Way. | EIR certified December 2005. |
| 114 | Long Beach Downtown Plan | Development standards and design guidelines for an expected increase in the density and intensity of existing Downtown land uses by allowing up to: (1) approximately 5,000 new residential units; (2) 1.5 million sq ft of new office, civic, cultural, and similar uses; (3) 384,000 square feet of new retail; (4) 96,000 sq ft of restaurants; and (5) 800 new hotel rooms. | Draft EIR released December 2010 |
| 115 | Art Exchange | Project components include artist studios, multipurpose/classroom space, hot shop for glass and ceramics production, a centrally located open courtyard, gallery space, office, and service areas. | Draft EIR was released in December 2009. City Planning Department has no estimated construction start and completion year. |
| 116 | North Village Center | The proposed project involves the redevelopment of an approximately 6.3-acre site in the City of Long Beach with a mixed-use "village center" project. | Final EIR was released in November 2009. In process for entitlement. City Planning Department has no estimated construction start and completion year. |
| 117 | Kroc Community Center | The reformation of up to 19 acres of land designated by the Salvation Army, through a grant from the Kroc Foundation, for the location of a new recreation and community center. | Final EIR was released in June 2009. Entitlements granted. City Planning Department has no estimated construction start and completion year. |
| 118 | Hotel Sierra, 290 Bay St | This project consists of a new 5-story 125-room hotel with approximately 15,000 square feet of ground floor retail space. | EIR Addendum was released in May 2009. City Planning Department has no estimated construction start and completion year. |
| 119 | 1235 Long Beach Blvd. Mixed-Use Project | The proposed project would include demolition of existing on-site uses and construction of a mixed-use (transit oriented) development that includes the construction of 3 buildings consisting of 170 residential condominium units, 186 senior (age-restricted) apartment units, and 42,000 sq ft of retail/restaurant floor area. | EIR Addendum was released in January 2008. Entitlements granted. City Planning Department has no estimated construction start and completion year. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| 120 | Douglas Park Rezone Project | The project consists of development of 1,400 residential units along with 3.3 million square feet of mixed commercial and light industrial development (which included a maximum of 200,000 sq ft of retail uses), 400 hotel rooms, and 10.5 acres of park space, with an additional 2.5 acres for view corridors/pedestrian easements and bicycle paths. | Construction is underway. Entitlements granted. |
| 121 | Ocean Blvd. Project | The proposed project would include the demolition of existing structures, the development of 51 condominium units and the remodel of an existing building to maintain 11 motel units. The residential development would be four stories in height above street level and would have two levels of subterranean parking. | Notice of Intent to Adopt was released in August 2009. Entitlements granted. City Planning Department has no estimated construction start and completion year. |
| 122 | Drake/Chavez Park Expansion | Developing new and expanding existing open space opportunities in the Drake/Chavez Park. | Project in progress. |
| 123 | Poly Gateway Project, Pacific Coast Highway and Martin Luther King Jr. Avenue | Development of passive open space that will serve as a gateway to Poly High School, located directly behind the site. | Construction was expected to begin in 3rd Quarter 2008. Construction status unknown. |
| 124 | 15th Street and Alamitos Avenue Open Space Development and Intersection Improvements | Passive park to include pedestrian hardscape, landscape lighting, light poles and planting areas. | Construction underway. |
| 125 | WPA Mosaic Open Space Development | Relocation of historic mural to an open space development at the south end of CityPlace. | Construction is expected to start in 2010. |
| 126 | Lyon West Gateway Residential Development, Broadway at Magnolia Avenue and 3rd Street | Mixed-use project consisting of 291 rental apartments (265 market rate and 26 affordable) and 15,000 sq ft of commercial space. | Construction underway. |
| 127 | Pine – Pacific, bounded by Pine and Pacific Avenues, and | Phase 1 will consist of a 5-story residential project with 175 living units and 7,280 sq ft of retail space. Phase 2 is slated as a 12-story mid-rise residential | Approved project. Construction pending |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| | 3rd and 4th Streets | development with 186 units and 18,670 sq ft of retail. | |
| 128 | Lofts at 3rd and Promenade | This is a mixed-use development project that consists of 104 rental homes and 13,550 sq ft of first-floor retail space. | Construction underway. |
| 129 | Broadway Block Development, Broadway, Long Beach Boulevard, 3rd street, and Elm Avenue | Mixed-use project consisting of an art center, residential units and commercial space. | Conceptual project. |
| 130 | Long Beach Transit/Visitor Information Center, downtown Long Beach | 1,900 square-foot transit customer service and visitor information center. | Construction underway. |
| 131 | Hotel Esterel, Promenade at Broadway | Seven-story, 165-room hotel with 8,875 sq ft of retail space and 3,000 sq ft of meeting space. | Construction underway. |
| 132 | Promenade Master Plan, between Shoreline Drive and 5th Street | Improvement, expansion and redesign of The Promenade. The Master Plan encompasses the gateways, hardscape, landscape, furniture, lighting and public art plazas along the three blocks between Ocean Boulevard and 3rd Street, as well as renovation of the amphitheater. | Construction underway. |
| 133 | Admiral Kidd Park Expansion Site, Santa Fe at Willard | The Admiral Kidd Park Expansion Site consists of the acquisition and development of industrial property for a 120,000-square-foot park expansion. | The site has been acquired and cleared. Construction underway. |
| 134 | Pacific Coast Highway Streetscape Improvement Project | This project involves the design and construction of new street medians, sidewalk landscaping, public art and refurbishment of existing bus shelters. | Approved project. Construction pending. |
| 135 | Everbright Paper Recycling Center | This is a development of a bulk paper recycling and processing center | Construction start date was expected to be in 3rd Quarter 2008, and completion date was expected to be in 2nd Quarter 2009. Construction status unknown. |
| 136 | Redbarn Pet Products | Upgrade with the development of an office and warehouse for use in the manufacturing and distribution of their pet food products. | Approved project. Construction pending. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| 137 | Smith-Co Construction | The Smith-Co Construction project consists of a plan to develop Agency-owned property into a two-story, 6,100-square-foot office and warehouse facility for Smith-Co Construction. | Construction start date was expected to be in 3rd Quarter 2005, and completion date was expected to be in 4th Quarter 2008. Construction status unknown. |
| 138 | J.C.D.S Properties – Sudduth Tire | J.C.D.S Properties – Sudduth Tire is a new development consisting of a two-story office building and shop area as well as a storage facility for local businesses. | Construction start date was expected to be in 3rd Quarter 2005, and completion date was expected to be in 4th Quarter 2007. Construction status unknown. |
| 139 | Westside Storm Drain Improvement Project | The Agency, along with developer DMJM Harris/ AECOM plans to improve and update existing storm drains in an effort to remedy street flooding. | Construction start date was expected to be in 1st Quarter 2006, and completion date is to be determined. Construction status unknown. |
| 140 | 250 Pacific Avenue | Conversion of AMC Pine Square movie theaters to 74 residential units. | In process for entitlement. City Planning Department has no estimated construction start and completion year. |
| 141 | Acres of Books | Construction of 11,000 sq ft collaborative art center including the partial reuse of an historic structure (240 Long Beach Blvd.) | In process for entitlement. City Planning Department has no estimated construction start and completion year. |
| 142 | 495 The Promenade North | Construction of 35,000 sq ft, 5-story mixed-use development including 6,000 sq ft of ground floor commercial area and 21 residential units. | In process for entitlement. City Planning Department has no estimated construction start and completion year. |
| 143 | 100 Aquarium Way | 23,300 sq ft expansion to the Aquarium of the Pacific. | In process for entitlement. City Planning Department has no estimated construction start and completion year. |
| 144 | 2010 Ocean Blvd. | Construction of 56 residential condominiums units with 40 hotel rooms. | Entitlements granted. City Planning Department has no estimated construction start and completion year. |

**Table 5-1: Related and Cumulative Projects**

| No. in Fig. 5-1 | Project Title and Location | Project Description | Project Status[a] |
|---|---|---|---|
| 145 | 433 Pine Ave. | Mixed use development of 28 residential units with 15,000 sq ft of commercial (Newberry's Department Store) | Under construction |
| 146 | 600 E. Broadway | 48,000 sq ft Vons Market w/128 rooftop parking spaces development | Under construction |

Notes:
[a] Construction date for the Port projects based on an assumption that the project would be approved by the LAHD.
References:
(1) City of Los Angeles Zoning Information and Map Access System (ZIMAS) http://zimas.lacity.org/
(2) City of Torrance Community Development Department's Major Project Report July 1, 2009 – December 31, 2009 http://torranceca.gov/PDF/July_1_2009_thru_Dec_31_2009.pdf
(3) City of Long Beach Department of Development Services – Major Project List – April 2010.
(4) http://www.lbds.info/planning/environmental_planning/environmental_reports.asp
(5) http://www.lbds.info/projects/default.asp
(6) City of Lomita Current Projects List, January 2011.
(7) City of Los Angeles, Community of San Pedro Projects List, January 2011.

1

# 5.2 Cumulative Impact Analysis

The following sections provide an analysis of the cumulative impacts identified for each of the resource areas relative to past, present, and reasonably foreseeable future projects (identified in Table 5-1), the proposed Project, and each alternative (refer to Chapter 6, Analysis of Alternatives, for a description of each alternative).

## 5.2.1 Aesthetics and Visual Resources

### 5.2.1.1 Scope of Analysis

The geographic scope of analysis for cumulative impacts on aesthetics and visual resources to which the proposed Project may contribute is a set of important public viewing areas (i.e., scenic routes and vistas) identified as Key Observation Points (KOPs) (refer to Section 3.1, Aesthetics and Visual Resources). An inventory of these existing views was developed based on field observations and review of maps and photographs of the area from which the Project site is visible. Outside of this set of points, the proposed Project would not be noticeable within public views and would therefore have no potential to contribute to cumulative aesthetic and visual impacts.

The resulting area for visual impact analysis generally encompasses the following: 1) Fish Harbor and the surrounding areas (KOP-1); 2) the Ports O'Call Village commercial and recreational area (KOP-2); 3) Harbor Boulevard/Harbor Scenic Route (KOP-3); 4) residential areas of San Pedro (KOP-4); and, 5) San Pedro Bluffs and Friendship Park (KOP-5). Refer to Figure 3.1-3 in Section 3.1, Aesthetics and Visual Resources, for the location of the five KOPs.

The visual changes that would result from implementation of the proposed Project would occur within the Port Complex, and would be similar to views of the existing ALBS and adjacent operations. Development in this area over the course of the past century, such as the construction of breakwaters, dredging of Harbor waters, creation of landfills for use as terminals and berths, and construction of the required infrastructure needed to support Port operations have completely transformed the original natural setting, into a highly engineered landscape that is visually dominated by large-scale man-made features.

Past, present, planned, and foreseeable future development that could contribute to cumulative impacts on Aesthetics and Visual Resources are those that have involved, or would involve, grading, paving, landscaping, construction of roads, buildings, and other working port facilities, as well as the presence and operation of equipment, such as gantry cranes, rail and trucking facilities and backland storage sites. Views may also be affected by in-water activities such as dredging, filling, wharf demolition and construction, and container ship traffic.

The significance criteria (also known as thresholds of significance) used for the cumulative analysis are the same as those used to evaluate the proposed Project in Section 3.1, Aesthetics and Visual Resources, for **AES-1, AES-2, AES-3,** and **AES-5.** It was determined that no impact would occur under AES-4; therefore, no cumulatively considerable contribution to a cumulative impact would occur and no cumulative analysis is required.

### 5.2.1.2 Cumulative Impact AES-1: The proposed Project would not contribute to a cumulatively considerable adverse effect on a scenic vista from a designated scenic resource due to obstruction of views – Less than Cumulatively Considerable

The proposed Project would not result in an adverse effect on a scenic vista from a designated scenic resource due to obstruction of views.

**Cumulative Impact AES-1** represents the potential of the proposed Project along with related cumulative projects to result in significant/significant adverse impacts on a scenic vista within the cumulative study area from a designated scenic resource. A cumulative impact on a scenic vista would occur if the development activities necessary to implement the proposed Project, in combination with one or more of the related cumulative projects, would result in significant/significant adverse impacts to such scenic vistas. Significant impacts would include substantial or total blockage of views from a designated scenic view vantage point.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Scenic views that encompass the Project site are primarily available from the higher elevations to the west in San Pedro and the Palos Verdes Peninsula. Views towards the Project site from these locations encompass the Port as well as intervening development and, if high enough elevations, the ocean and horizons beyond.

The visual changes that would be brought about by the proposed Project would be taking place in the distinctive landscape region created by the Port Complex, which collectively constitute one of the largest port complexes in the world. In this area, over the course of the past century, the construction of breakwaters, the dredging of channels, filling for creation of berths and terminals, and construction of the infrastructure required to support Port operations have completely transformed the original natural setting to create a landscape that is highly engineered, nearly entirely altered, and visually dominated by large-scale man-made features. Past, present, and future projects at the Port have contributed, and will contribute, to the elimination of natural features, reductions in views from the surrounding area of the open waters of the Port's channels and basins, and an intensification of visible development. For example, development of the Pier 400 Container Terminal and Transportation Corridor Project (completed in 2005) reduced open-water views from hillside areas in San Pedro. The combined development of large-scale projects such as Evergreen Terminal (#5), Plains All American Oil Marine Terminal (#10), and APL Container Terminal (#29) would increase the concentration of large-scale developed facilities within the Port Complex.

As a result, the existing visual quality from many of the scenic points with views into the Port is low to moderately low due to the prominent visibility of intensive shipping and industrial operations. There are specific sites that provide higher quality views, either due to existence of open water, views of the horizon and Pacific Ocean, or other features of interest.

The space within the Port has already been graded and developed. Therefore, present, and reasonably foreseeable future projects visible at the Port would generally be built on previously developed land within the existing Port boundaries, would be consistent with the existing operations and uses, and would not need to be integrated into the aesthetics

of the site through special design techniques. As presented in Table 5-1, the cumulative related projects identified within the Port consist primarily of redevelopment or expansion projects, including container terminal and wharf improvements, construction of new facilities, and roadway modifications. As a result, these cumulative projects would result in construction of features that would be similar to existing development and would not contrast with existing visual conditions from scenic view points. Further, while the present, and reasonably foreseeable future projects would increase the level of development visible from the scenic viewpoints, they would not obstruct available views of the working port and horizon beyond. Therefore, given the existing working Port setting, the cumulative impacts of past, present, and reasonably foreseeable future projects combined would not result in a cumulatively considerable impact and does not result in a significant cumulative impact.

## Contribution of the Proposed Project

The proposed Project would demolish utilitarian structures that do not substantially contribute to the scenic value of the area. As discussed in detail in Section 3.1.4.3, construction of the proposed Project elements, including new 600- and 100-ton boat hoists, would be visible from KOP-1 Fish Harbor. Views of the Project site from KOP-2 Port O'Call Village and KOP-3 Harbor Boulevard are blended in or blocked from other Terminal Island facilities and construction activities and the Project elements would be relatively small in scale compared to the overall context of a working Port from the KOPs. Views from KOP-4 San Pedro and KOP-5 Friendship Park are distant and would not be obstructed by construction activities. Further, the proposed buildings and infrastructure would be consistent with the existing features of the Port Complex, and would not visually contrast with the valued landscape features of the area. Therefore, the proposed Project would not substantially alter or interfere with the publics visual access to existing views (would not interrupt or block the view). As such, the proposed Project in combination with past, present, and foreseeable projects would not make a cumulatively considerable contribution to a significant cumulative impact.

## Mitigation Measures and Residual Cumulative Impacts

The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1, 2, 3, and 7

Under Alternative 1 through 3 and 7, visual changes to the Project site would be similar or less than that of the proposed Project. Therefore, there would be no adverse impact to the viewscape or obstruction of scenic views. Alternatives 1 through 3 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact.

### Alternative 4

Under Alternative 4, the changes to the Project site would be the same as the proposed Project. The potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront in compliance with the LA Waterfront Design Guidelines. There is existing Port-related development within the waterfront areas and it is anticipated that the relocation of the buildings would not change the existing viewscape or obstruct scenic views. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact.

#### Alternative 5

Under Alternative 5, the Project site would be vacated. The potentially historic buildings would be relocated to the new site and the remaining buildings/structures would be demolished. Although under this alternative the site would be cleared and left vacant, there are other sites within the vicinity of the site that have also been cleared; therefore, it is not anticipated that this would adversely impact the viewscape. Project operations would be relocated to an alternate site within the working Port. The sites being considered are currently, or were in the past, used for Port activities and the relocation of ALBS activities would not substantially alter the viewscape or obstruct scenic views. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact.

#### Alternative 6

Under Alternative 6, the Project site would be vacated. Although under this alternative the site would be cleared and left vacant, there are other sites within the vicinity of the site that have also been cleared; therefore, it is not anticipated that this would not adversely impact the viewscape. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact.

### 5.2.1.3 Cumulative Impact AES-2: The proposed Project would not contribute to cumulatively considerable damage to scenic resources (including, but not limited to, trees, rock outcroppings, and historic buildings) within a state scenic highway – Less than Cumulatively Considerable

**Cumulative Impact AES-2** evaluates whether the proposed Project would considerably contribute to the adverse effect of past, present and future projects on the scenic resources within view from a state scenic highway. The *L.A. CEQA Thresholds Guide* (City of Los Angeles, 2006) expands the CEQA Appendix D Aesthetics questions by addressing views from scenic routes, corridors and parkways.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

As noted in Section 3.1.4.3, while there are no state-designated scenic highways in the vicinity of the proposed Project. Harbor Boulevard (KOP-3) is a City-designated scenic route because it affords views of the working Port and the Vincent Thomas Bridge. Several of the past, present, future projects listed in Table 5-1 are expected to contribute to the board array of views available from Harbor Boulevard, including the San Pedro Waterfront Project (#2), Evergreen Container Terminal (#5), Plains All American Oil Marine Terminal (#10), China Shipping Terminal (#14), Yang Ming Terminal (#24), Southwest Marine Demolition (#25), and APL Container Terminal (#29). These projects would add to the visual clutter and some would potentially lead to further obstruction of views of the working Port and/or Vincent Thomas Bridge afforded from the Harbor Scenic Route. The degree of view blockage created by past, present, and future projects on views of the working Port and the Vincent Thomas Bridge from past, present and foreseeable future projects would result in a significant cumulative impact.

## Contribution of the Proposed Project

There are no designated state scenic highways within the proposed Project area. In addition, views from the locally-designated scenic route do not effectively include the proposed Project for the following reasons:

- Whether heading north or south along Harbor Boulevard, views toward proposed Project are substantially blocked by Port facilities, residential development, topography, landscaping, or a combination of these factors.
- Where the proposed Project site is visible it is not within the normal field of view of motorists, being from 60 to 90 degrees or more away from the direction of travel, depending on the location and direction of travel.

Since the proposed Project would not be within public views from designated state scenic highways, it would make no contribution to cumulative impacts in this area. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact related to scenic resources along any state or city scenic highways.

## Mitigation Measures and Residual Cumulative Impacts

The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1, 2, 3, and 7

Under Alternative 1 through 3 and 7, visual changes to the Project site would be similar or less than that of the proposed Project. Further, there are no designated state scenic highways within the proposed Project area. Alternatives 1 through 3 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact.

### Alternative 4

Under Alternative 4, the visual changes to the Project site would be the same as the proposed Project. However, the potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront in compliance with the LA Waterfront Design Guidelines. While there are no state designated scenic highways within the Project area, depending on the relocation site, the buildings may be visible from Harbor Boulevard (KOP-3), which is a City-designated scenic route. There is existing Port-related development within the waterfront areas and the relocation of the buildings would be similar in character to the existing visual environment and would not damage scenic resources visible from a scenic highway. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact.

### Alternative 5

Under Alternative 5, the Project site would be vacated. While there are no state designated scenic highways within the Project area, due to distance, the vacated site would also not adversely impact the view from Harbor Boulevard (a City-designated scenic route). Project operations, including the potentially historic buildings, would be relocated to an alternate site within the working Port. The sites being considered are currently, or were in the past, used for Port activities, thus the relocation of ALBS operations would be similar to the existing setting and would not adversely affect scenic

resources visible from a scenic highway. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact.

#### Alternative 6

Under Alternative 6, the Project site would be vacated. While there are no state designated scenic highways within the Project area, due to distance, the vacated site would also not adversely impact the view from Harbor Boulevard (a City-designated scenic route). Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact.

### 5.2.1.4 Cumulative Impact AES-3: The proposed Project would not contribute to a cumulatively considerable impact due to degradation of the existing visual character or quality of the site or its surroundings – Less than Cumulatively Significant

**Cumulative Impact AES-3** represents the potential of the proposed Project along with related cumulative projects to result in significant impacts on visual character or quality within the cumulative study area.

A cumulative impact on visual character or quality would occur if implementation of the proposed Project, in combination with one or more of the related cumulative projects, would alter or remove valued features that substantially define the character of the San Pedro community or the Port in positive terms – the alteration or removal of which would significantly diminish visual quality within the cumulative visual impacts study area. Significant impacts would include the demolition of visual landmarks or the insertion of new development that degrades visual quality.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The visual character of the cumulative project area comprises a diverse array of engineered, industrial, marine, and recreational elements associated with the working Port, waterfront commerce, and recreational beaches and marinas. These contrasting elements make the Port a highly textured, large-scaled, and lively landscape. Views of the marina and water-related recreational activities are framed by cranes, cargo ships, and containers, and there is an overall compositional harmony between natural and manmade elements.

Past projects at the Port have affected views from the surrounding area and have resulted in a cumulatively significant impact relative to Cumulative Impact AES-3. However, present and reasonably foreseeable future projects would be consistent with existing features of the Port landscape region. Overall, the Port setting would be capable of integrating Port-related development within the array of compositional elements because this type of development defines the visual imagery of the Port. The impact of past, present and reasonably foreseeable future projects is, therefore, not cumulatively considerable and results in a less than significant cumulative impact.

#### Contribution of the Proposed Project

The Project would demolish six buildings (of which two are small sheds), construct an additional building on the site, install 600- and 100-ton boat hoists, and construct two CDFs using contaminated dredged material from the Harbor. The CDFs may be visible

from the Al Larson Marina; however, Project implementation would not deter or detract from the use of the marina and would remain oriented toward the Outer Harbor. Substantial degradation of the visual character of the Project area would not occur because the proposed Project improvements are industrial in nature and therefore consistent with the existing industrial uses and facilities throughout the Port Complex.

The improvement of the boat shop would be compatible with the existing visual character of the area. The proposed Project would not substantially degrade the existing visual character or quality of the site or its surroundings, and could actually result in a positive visual impact by replacing old dilapidated buildings with newer, more modern structures. Implementation of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

## Mitigation Measures and Residual Cumulative Impacts

The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1, 2, 3, and 7

Under Alternative 1 through 3 and 7, visual changes to the Project site would be similar or less than that of the proposed Project. Therefore, the visual changes would be consistent with the existing industrial uses and facilities throughout the Port Complex. Alternatives 1 through 3 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact.

### Alternative 4

Under Alternative 4, the changes to the Project site would be the same as under the proposed Project. The potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront in compliance with the LA Waterfront Design Guidelines. There is existing Port-related development within the waterfront areas and it is anticipated that the relocation of the buildings would be similar character. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact.

### Alternative 5

Under Alternative 5, the Project site would be vacated, which would change, but not adversely impact the visual character. Project operations, including the potentially historic buildings, would be relocated to an alternate site within the working Port. The sites being considered are currently, or were in the past, used for Port activities and the relocation of such development activities would be consistent with the existing industrial uses and facilities throughout the Port Complex. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact.

### Alternative 6

Under Alternative 6, the Project site would be vacated, which would change, but not adversely impact the visual character. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact.

### 5.2.1.5 Cumulative Impact AES- 5: The proposed Project would not contribute to a cumulatively considerable impact due to creating a new source of substantial light or glare that would adversely affect day or nighttime views of the area – Less than Cumulatively Significant

**Cumulative Impact AES**-5 represents the potential for the proposed Project and related cumulative projects to result in cumulatively considerable adverse impacts in the cumulative study area through the creation of a new source of substantial light or glare that would adversely affect day or nighttime views. This criterion is related to the CEQA Guidelines Appendix G Aesthetics checklist question "Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?" and the *L.A. CEQA Thresholds Guide* factors for determining significance under the Nighttime Illumination visual element (City of Los Angeles, 2006).

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The Port's current nighttime environment has substantial amount of existing nighttime illumination. Located in a highly urbanized area the local environment receives nighttime illumination from the Port and the neighboring Port of Long Beach and surrounding industrial areas. Past projects at the ports and in surrounding industrial areas have had the effect of creating sources of unshielded or poorly shielded and directed light that have had the effect of causing light spillage.

The major sources of illumination at the Port are the hundreds of down lights and floodlights attached to the tops of the tall light standards, as well as the street and roadway lighting. Other sources include high-intensity boom lights located on top of cranes and floodlights attached to the bottom and sides of the crane that illuminate the crane, the vessel, and the immediately surrounding area during loading or unloading of vessels. While the Port upgrades these older light fixtures overtime, reducing the amount of light spillage and ambient illumination levels in nearby areas; the net effect of past projects has been to create a significant cumulative impact. However, because of the standards that the Port is now implementing to minimize the lighting impacts of new projects, the contributions of present and future projects to cumulative lighting impacts in the area will be limited.

The related projects listed in Table 5-1 that have the capability of contributing the most light and glare in the vicinity of the Project site through the use of cranes, lighted backlots, or other uses that need extra lighting include the Evergreen Container Terminal (#5), Plains All American Oil Marine Terminal (#10), and APL Container Terminal (#29). Other related projects would contribute light in other areas of the Port, but outside of the general field of vision of the KOPs. New lighting from the related projects would be required to comply with the new Port standards put in place to minimize the lighting impacts of new projects, including providing shielding and directing lights downward to minimize off-site spill over. Additionally, since the existing levels of ambient lighting in the area are already high, adding new light sources generally results in an incremental increase in ambient lighting conditions. However, the net effect of each of the past, present, and reasonably foreseeable future related projects would result in a cumulatively considerable and significant cumulative impact related to light and glare.

## Contribution of the Proposed Project

As documented in the analysis in Section 3.1.4, the incremental change in ambient lighting conditions that would be brought about by lighting improvements consisting of new 40-foot perimeter lightpoles required for the new structures, equipment, and expanded land area created by the CDFs would be minimal. The amount of new on-site light would not create a substantial change in existing levels of ambient light in sensitive areas in the Project vicinity. The visibility of this new lighting and its contribution to ambient lighting conditions in areas around the Project site would be attenuated by directing lights downward in a manner that would only illuminate the intended areas and prevent spillover. The proposed lighting design would represent a minimal increase in light and glare sources compared to existing conditions. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact related to an increase in ambient lighting or glare.

## Mitigation Measures and Residual Cumulative Impacts

The design of the lighting to be implemented at the ALBS under the proposed Project would incorporate a range of measures to minimize off-site lighting impacts. Given that the lighting plan already makes maximum use of measures to attenuate the proposed Project's lighting effect and that Project lighting would not make a cumulatively considerable contribution to a significant cumulative impact, no mitigation measures are recommended. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

## Project Alternatives

### Alternatives 1, 2, 3, 6 and 7

Under Alternative 1 through 3, 6, and 7, lighting of the Project site would be similar or less than that of the proposed Project and thus would not result in a substantial increase in light and glare sources compared to existing conditions. Alternatives 1 through 3, 6 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact.

### Alternative 4

Under Alternative 4, the increase in light and glare at the Project site would be the same as under the proposed Project. The potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront in compliance with the LA Waterfront Design Guidelines (which includes lighting requirements). It is anticipated that any lighting required for the relocated buildings would be minimal (i.e., security lighting). Given the high levels of existing lighting along the waterfront areas and within the working Port, any new lighting sources at the relocated buildings would not result in a substantial increase in light and glare sources. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact.

### Alternative 5

Under Alternative 5, the Project site would be vacated, which would reduce lighting and glare sources on-site. Project operations would be relocated to an alternate site within the working Port. Light and glare impacts at an alternate site within the Port would be similar to that of the proposed Project. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact.

# 5.2.2 Air Quality, Meteorology, and Greenhouse Gases

## 5.2.2.1 Scope of Analysis

The region of analysis for cumulative effects on air quality is the South Coast Air Basin for Cumulative Impacts AQ-1 through AQ-7, and globally for Cumulative Impact AQ-8 (global climate change). However, the highest project impacts would occur within the communities adjacent to the proposed Project site, including San Pedro, Wilmington, and Long Beach.

## 5.2.2.2 Cumulative Impact AQ-1: The proposed Project would contribute to cumulatively considerable construction-related emissions that exceed an SCAQMD threshold of significance – Cumulatively Considerable and Unavoidable

**Cumulative Impact AQ-1** assesses the potential for proposed project construction along with other cumulative projects to produce a cumulatively considerable increase in criteria pollutant emissions for which the proposed project region is in nonattainment under a national or state ambient air quality standard or for which the SCAQMD has set a daily emission threshold.

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Due to its substantial amount of emission sources and topographical/meteorological conditions that inhibit atmospheric dispersion, the South Coast Air Basin is an "extreme" nonattainment area for 8-hour $O_3$, a "serious" nonattainment area for $PM_{10}$, and a nonattainment area for $PM_{2.5}$ in regard to the National Ambient Air Quality Standards (NAAQS). The South Coast Air Basin is in attainment of the NAAQS for CO, $SO_2$, and $NO_2$. In regard to the California Ambient Air Quality Standards (CAAQS), the South Coast Air Basin is presently in nonattainment for $O_3$, $PM_{10}$, $PM_{2.5}$, $NO_2$ and lead. The South Coast Air Basin is in attainment of the CAAQS for $SO_2$, CO, and sulfates and is unclassified for hydrogen sulfide and visibility-reducing particles. These pollutant nonattainment conditions within the project region are therefore cumulatively considerable. In the time period between 2011 and 2013, a number of large construction projects will occur at the two ports and surrounding areas (see Table 5-1) that will overlap and contribute to significant cumulative construction impacts.

The *2007 Air Quality Management Plan* (AQMP) predicts attainment of all NAAQS within the South Coast Air Basin, including $PM_{2.5}$ by 2015 and $O_3$ by 2024 (SCAQMD, 2007). However, the predictions for $PM_{2.5}$ and $O_3$ attainment are speculative at this time.

The construction impacts of the related projects would be cumulatively considerable and significant if their combined construction emissions would exceed the SCAQMD daily emission thresholds for construction. Because this almost certainly would be the case for all analyzed criteria pollutants and precursors (VOCs, CO, $NO_X$, $SO_X$, $PM_{10}$, and $PM_{2.5}$), the related projects would result in a significant cumulative air quality criteria pollutant impact.

### Contribution of the Proposed Project

Emissions from proposed Project construction would increase relative to baseline emissions for VOCs, CO, $NO_X$, $SO_X$, $PM_{10}$, and $PM_{2.5}$. Because Project construction

would result in additive criteria pollutant emissions (VOCs, CO, $NO_X$, $SO_X$, $PM_{10}$, and $PM_{2.5}$) and cumulative emissions would likely exceed threshold levels, Project construction is deemed to make a cumulatively considerable contribution to significant cumulative air quality impacts. For the Project, only the VOC and NOx emissions would exceed the SCAQMD threshold for construction. Emissions of VOC and NOx would therefore combine with emissions from concurrent construction projects, which would already be cumulatively significant. As a result, emissions from proposed Project construction would make a cumulatively considerable contribution to a significant cumulative impact for VOC and $NO_X$ emissions.

#### Mitigation Measures and Residual Cumulative Impacts

After mitigation, construction emissions of NOx would continue to be significant. Therefore, during construction, the proposed Project after mitigation would make a cumulatively considerable and unavoidable contribution to a cumulative significant impact for NOX emissions.

#### Project Alternatives

##### Alternatives 1, 2, 3, 4, and 7

As with the proposed Project, emissions from construction of Alternatives 1 through 4, and Alternative 7 would increase relative to baseline emissions for VOCs, CO, $NO_X$, $SO_X$, $PM_{10}$, and $PM_{2.5}$ however levels would be similar or less than that of the proposed Project. Therefore, construction of Alternatives 1 through 4, and 7 would make a cumulatively considerable contribution to significant cumulative air quality impacts. After mitigation, Alternative 1 would be less than cumulatively considerable for NOx emissions. However, after mitigation, Alternatives 2 through 4, and 7, would make a cumulatively considerable and unavoidable contribution to a cumulative significant impact for NOx emissions.

##### Alternatives 5 and 6

Under Alternatives 5 and 6, emissions would be greater than under the proposed Project given that all existing structures on the Project site would be removed or relocated, a larger amount of soils and sediments would be transported off-site, and, in the case of Alternative 5, construction/assembly of buildings would occur at an alternate site. Therefore, construction of Alternatives 5 and 6 would make a cumulatively considerable contribution to significant cumulative air quality impacts. After mitigation, Alternatives 5 and 6 would make a cumulatively considerable and unavoidable contribution to a cumulative significant impact for NOx emissions.

### 5.2.2.3 Cumulative Impact AQ-2: Potential for Construction to Produce Emissions that Exceed an Ambient Air Quality Standard or Substantially Contribute to an Existing or Projected Air Quality Standard Violation – Cumulatively Considerable and Unavoidable

**Cumulative Impact AQ-2** assesses the potential for proposed Project construction along with other cumulative projects to produce ambient pollutant concentrations that exceed an ambient air quality standard or substantially contribute to an existing or projected air quality standard violation.

## Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The past, present, and reasonably foreseeable future projects for Cumulative Impact AQ-2 would result insignificant cumulative impacts if their combined ambient pollutant concentrations, during construction, would exceed the SCAQMD ambient concentration thresholds for pollutants from construction. Although there is no way to be certain if a cumulative exceedance of the thresholds would happen for any pollutant without performing dispersion modeling of the other projects, cumulative air quality impacts are likely to exceed the thresholds for $NO_2$, $PM_{10}$, and $PM_{2.5}$, and are unlikely to exceed for CO (due to the magnitude of the threshold for a 1-hour period). Consequently, construction of the related projects would result in a cumulatively significant air quality impact related to exceedances of the significance thresholds for $NO_2$, $PM_{10}$, and $PM_{2.5}$.

## Contribution of the Proposed Project

The SCAQMD develops ambient pollutant thresholds that signify cumulatively considerable increases in criteria pollutant concentrations. Project construction emissions would produce off-site impacts that would exceed the SCAQMD ambient thresholds for Federal 1-hour $NO_2$ and 24-hour $PM_{10}$ and $PM_{2.5}$. Any concurrent emissions-generating activity that occurs near the Project site would add additional air emission burdens to these significant levels. As a result, emissions from Project construction would make a cumulatively considerable contribution to a significant cumulative impact related to ambient $NO_2$, $PM_{10}$, and $PM_{2.5}$ levels.

## Mitigation Measures and Residual Cumulative Impacts

The main source of NOx emissions from the ALBS is the air compressors used during spray coating operations. The air compressors must be portable and cannot feasibly be replaced with electric units and no other feasible methods to reduce emissions were identified. As a result, no mitigation measures are proposed to reduce $NO_2$ emissions and impacts from proposed Project construction would continue to exceed the Federal 1-hour $NO_2$, and 24-hour $PM_{10}$ and $PM_{2.5}$ thresholds. Construction emissions would also make a cumulatively considerable contribution to a cumulatively significant (and unavoidable) impact relative to ambient $NO_2$, $PM_{10}$, and $PM_{2.5}$ levels from concurrent related-project construction. In addition, under mitigation measure **MM AQ-3** which requires use of Tier 3 dredging equipment, cumulatively significant impacts would increase over baseline and also be cumulatively considerable and unavoidable for $NO_2$, $PM_{10}$ and $PM_{2.5}$. As a result, the proposed Project would make a cumulatively considerable contribution to a significant cumulative impact related to ambient $NO_2$, $PM_{10}$, and $PM_{2.5}$ levels.

## Project Alternatives

### Alternatives 1, 2, 3, 4, and 7

As with the proposed Project, emissions from construction of Alternatives 1 through 4, and 7 would continue exceed the Federal 1-hour $NO_2$, and 24-hour $PM_{10}$ and $PM_{2.5}$ thresholds at levels similar to or less than the proposed Project. Therefore, construction of Alternatives 1 through 4 and 7 would make a cumulatively considerable contribution to significant cumulative air quality impacts related to ambient $NO_2$, $PM_{10}$, and $PM_{2.5}$ levels. There are no mitigation measures to reduce $NO_2$ emissions; therefore, the alternatives' contribution would continue to be cumulatively considerable and unavoidable.

### Alternatives 5 and 6

Under Alternative 5 and 6, emissions from construction would be greater than the proposed Project. Therefore, construction of Alternatives 5 and 6 would make a cumulatively considerable contribution to significant cumulative air quality impacts related to ambient $NO_2$, $PM_{10}$, and $PM_{2.5}$ levels. There are no mitigation measures to reduce $NO_2$ emissions; therefore, the alternatives' contribution would continue to be cumulatively considerable and unavoidable.

## 5.2.2.4 Cumulative Impact AQ-3: Potential for Operation to Produce a Cumulatively Considerable Increase of a Criteria Pollutant for which the Project Region is in Nonattainment Under a National or State Ambient Air Quality Standard – Cumulatively Insignificant

**Cumulative Impact AQ-3** assesses the potential for proposed Project operation along with other cumulative projects to produce a cumulatively considerable increase in criteria pollutant emissions for which the project region is in nonattainment under a national or state ambient air quality standard or for which the SCAQMD has set a daily emission threshold.

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The other related projects would result in significant cumulative impacts if their combined operational emissions would exceed the SCAQMD daily emission thresholds for operations. Because this almost certainly would be the case for all analyzed criteria pollutants, the related projects would result in a significant cumulative air quality criteria pollutant impact.

### Contribution of the Proposed Project

Peak daily emissions from proposed Project operation would increase relative to baseline emissions for all criteria pollutants, and would therefore contribute to cumulative emissions. As a result, these Project operational emission increases would combine with operation emissions from other projects near the proposed Project site, which would already be cumulatively significant. However, emissions increases from Project operations would not exceed SCAQMD thresholds for any criteria pollutant. Although emissions from the proposed Project operation would contribute to cumulative criteria pollutant emissions, the contributions are not considered to be cumulatively considerable. Therefore, operation of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact for criteria pollutants.

### Mitigation Measures and Residual Cumulative Impacts

Mitigation is not required because the proposed Project would not contribute to cumulatively considerable increases in criteria pollutant emissions. The proposed Project would not make a cumulatively considerable contribution to a significant air quality impact.

### Project Alternatives

#### Alternatives 1 and 6

Existing peak daily emissions would remain the same as existing levels under Alternatives 1 and be eliminated under Alternative 6. Therefore, Alternatives 1 and 6 would not have an impact and thus not make a cumulatively considerable contribution to a significant cumulative impact for criteria pollutants.

#### Alternatives 2, 3, 4, 5, and 7

Peak daily emissions from Alternatives 2 through 5, and Alternative 7 operations would increase relative to baseline emissions for all criteria pollutants at levels similar to or less than proposed Project; therefore, operation of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact for criteria pollutants.

## 5.2.2.5 Cumulative Impact AQ-4: Potential for Operation to Produce Emissions that Exceed an Ambient Air Quality Standard or Substantially Contribute to an Existing or Projected Air Quality Standard Violation – Cumulatively Considerable and Unavoidable

**Cumulative Impact AQ-4** assesses the potential for proposed Project operation along with other cumulative projects to produce ambient concentrations that exceed an ambient air quality standard or substantially contribute to an existing or projected air quality standard violation.

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The related projects would result in significant cumulatively impacts if their combined ambient concentration levels during operations would exceed the SCAQMD ambient concentration thresholds for operations. Although there is no way to be certain if a cumulative exceedance of the thresholds would happen for any pollutant without performing dispersion modeling of the other projects, cumulative air quality impacts are likely to exceed the thresholds for $NO_2$, could exceed the thresholds for $PM_{10}$ and $PM_{2.5}$, and are unlikely to exceed for CO. Consequently, operation of the related projects would result in a cumulatively significant air quality impact related to exceedance of the significance thresholds for $NO_2$, $PM_{10}$, and $PM_{2.5}$.

### Contribution of the Proposed Project

The proposed Project operational emissions do not exceed the SCAQMD's CEQA thresholds of significance for any criteria pollutant on a maximum pounds per day basis. However the SCAB is a nonattainment area for $NO_2$, $PM_{10}$ and $PM_{2.5}$. Dispersion modeling of on-site and off-site Project operational emissions of NOx, $PM_{10}$ and $PM_{2.5}$ was performed to assess the impact of the proposed Project on local ambient air concentrations to assess the potential for proposed Project operations to significantly increase concentrations of these pollutants.

The dispersion modeling evaluation found the proposed Project ambient concentration impacts for Federal 1-hour $NO_2$, peak day and annual $PM_{10}$, and peak day $PM_{2.5}$ would exceed SCAQMD operational thresholds. Therefore, the total ground level concentrations would be significant. Project operations would make a cumulatively considerable contribution to a significant impact.

#### Mitigation Measures and Residual Cumulative Impacts

There are no mitigation measures to reduce $NO_2$ emissions; therefore, impacts from Project operation would exceed 24-hour and annual $PM_{10}$, and 24-hour $PM_{2.5}$ ambient thresholds. As a result, emissions from operation of the proposed Project and alternatives would make a cumulatively considerable contribution to a significant impact.

#### Project Alternatives

##### Alternatives 1 and 6

Existing peak daily emissions would remain the same under Alternative 1 and be eliminated under Alternative 6. Therefore, Alternatives 1 and 6 would have no impact and thus not make a cumulatively considerable contribution to a significant cumulative impact relative to 24-hour and annual $PM_{10}$, and 24-hour $PM_{2.5}$ ambient thresholds.

##### Alternatives 2, 3, 4, 5, and 7

Peak daily emissions from Alternatives 2 through 5 and 7 operations would increase relative to baseline emissions for all criteria pollutants at levels similar to or less than proposed Project. Therefore, operation of Alternatives 2 through 5 and 7 would make a cumulatively considerable contribution to a significant cumulative impact related to exceedance of the significance thresholds for $NO_2$, $PM_{10}$, and $PM_{2.5}$. Mitigation would reduce emissions; however, the alternatives' contribution would continue to be cumulatively considerable and unavoidable.

### 5.2.2.6 Cumulative Impact AQ-5: Potential for Operation to Create Objectionable Odors at the Nearest Sensitive Receptor – Cumulatively Insignificant

**Cumulative Impact AQ-5** assesses the potential of the proposed Project operation along with other cumulative projects to create objectionable odors at the nearest sensitive receptor.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

There are temporary and semi-permanent sources of odors within the Port region, including mobile sources powered by diesel and residual fuels and stationary industrial sources, such as petroleum storage tanks. Some individuals may sense that diesel combustion emissions are objectionable in nature, although quantifying the odorous impacts of these emissions to the public is difficult. Due to the greater distance of residents (sensitive receptors) from the proposed Project, and the minimal stationary industrial sources related to the proposed Project, odorous emissions in the Project region are considered to be cumulatively insignificant.

#### Contribution of the Proposed Project

Operation of the Project would increase diesel emissions within the Port. However these increases would not occur near residential areas and would not be considered to be

significant from a cumulative analysis. As a result, Project operations would not make a cumulatively considerable contribution to a significant impact in regards to odor impacts within the Project region

#### Mitigation Measures and Residual Cumulative Impacts

Mitigation is not required because the proposed Project would not make a cumulatively considerable contribution to a significant impact related to odors.

#### Project Alternatives

##### Alternatives 1 and 6

Diesel emissions associated with operation would not increase under Alternatives 1 and be eliminated under Alternative 6. Therefore, Alternatives 1 and 6 would have no impact and thus not make a cumulatively considerable contribution to a significant cumulative impact relative to odor within the Project region.

##### Alternatives 2, 3, 4, 5, and 7

Diesel emissions associated with operation of Alternatives 2 through 5 and 7 would be similar to or less than proposed Project. Therefore, operation of Alternatives 2 through 5 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to odor.

### 5.2.2.7 Cumulative Impact AQ-6: Exposure of Receptors to Significant Levels of Toxic Air Contaminants – Cumulatively Considerable and Unavoidable

**Cumulative Impact AQ-6** assesses the potential of the proposed Project construction and operation along with other cumulative projects to produce toxic air contaminants (TACs) that exceed acceptable public health criteria.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The *Multiple Air Toxics Exposure Study* (MATES-III) conducted by the SCAQMD in 2008 estimated the existing cancer risk from toxic air contaminants in the South Coast Air Basin to be 1,200 in a million (SCAQMD, 2008). In MATES III, completed by SCAQMD, the existing cancer risk from toxic air contaminants was estimated at a maximum of 3,700 per million in the highest grid cell, followed by the area south of Central Los Angeles with risk ranging from 1,400 to 1,900 in a million. In the *Diesel Particulate Matter Exposure Assessment Study for the Ports of Los Angeles and Long Beach*, the CARB estimates that elevated levels of cancer risks due to operational emissions from the Ports of Los Angeles and Long Beach occur within and in proximity to the two Ports (CARB, 2006). Based on this information, airborne cancer and non-cancer levels within the project region are therefore cumulatively considerable.

The Port has approved port-wide air pollution control measures through their San Pedro Bay Ports Clean Air Action Plan (CAAP) 2010 Update (POLA and POLB, 2010). Implementation of these measures will reduce the health risk impacts from the Project and future projects at the Port. Currently adopted regulations and future rules proposed by CARB and USEPA also will further reduce air emissions and associated cumulative health impacts from Port operations. However, because future proposed measures (other than CAAP measures) and rules have not been adopted, they have not been accounted for in the emission calculations or health risk assessment for the Project. Therefore, it is

unknown at this time how these future measures would reduce cumulative health risk impacts within the Port project area, and therefore, airborne cancer and non-cancer impacts within the project region would therefore still be cumulatively significant.

## Contribution of the Proposed Project

The main source of health risk associated with the proposed Project would occur during construction. Prior to mitigation, proposed Project construction emissions of TACs would increase cancer risks from baseline levels.

The maximum cancer risk increment associated with the unmitigated proposed Project is predicted to be 29 in a million at a residential receptor, 9 in a million at an occupational receptor, and less than 1 in a million at recreational, sensitive, and student receptors. The cancer risk therefore would be cumulatively significant for residential and occupational receptors.

The maximum chronic hazard index increment associated with the unmitigated Project is predicted to be 0.03 at residential receptors and occupational receptors, and less than 0.01 at sensitive, recreational, and student receptors. No chronic hazard index impact exceeds the threshold of 1.0; therefore chronic health risk impacts associated with the proposed Project would be cumulatively insignificant.

The acute hazard index increments associated with residential receptors (3.5) and occupational receptors (4.2) would exceed the significance criterion hazard index of 1.0. As a result, acute non-cancer effects would be cumulatively significant.

Any concurrent emissions-generating activity that occurs near the Project site would add additional airborne health burdens to these significant levels. As a result, emissions from Project construction would make a cumulatively considerable contribution to a significant impact.

## Mitigation Measures and Residual Cumulative Impacts

The residential and occupational cancer risks after Project mitigation described in Section 3.2, Air Quality, Meteorology, and Greenhouse Gases, are 4 in a million and 7 in a million, respectively. The acute residential hazard index (3.3) and occupational hazard index (4.1) remains significant after mitigation. Therefore, after mitigation, the residential and occupational acute hazard index remains significant and unavoidable. As a result, even with mitigation, the proposed Project would make a cumulatively considerable contribution to a significant health risk impact.

## Project Alternatives

### Alternatives 1 and 7

The main source of health risk would occur during construction. Given that the amount of construction would be considerably less and of shorter duration under Alternative 1 and Alternative 7 (i.e. no dredging would occur), it is anticipated that health risk impacts would be less than significant for all receptor types. Therefore, Alternatives 1 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to health risk.

### Alternatives 2, 3, and 4

The main source of health risk would occur during construction. Construction emissions occurring under from Alternatives 2 through 4 would be similar to or slightly less than the proposed Project. Therefore, Alternatives 2 through 4 would make a cumulatively

considerable contribution to a significant cumulative impact related to health risk. Mitigation measure would reduce this impact; however, the alternatives' contribution would continue to be cumulatively considerable and unavoidable.

#### Alternatives 5 and 6

Construction emissions under Alternatives 5 and 6 would be greater than under the proposed Project given that all existing structures on the Project site would be removed or relocated, a larger amount of soils and sediments would be transported off site, and, in the case of Alternative 5, construction/assembly of buildings would occur at an alternate site. Therefore, construction of Alternatives 5 and 6 would make a cumulatively considerable contribution to significant cumulative health risk. Mitigation measure would reduce this impact; however, the alternatives' contribution would continue to be cumulatively considerable and unavoidable.

### 5.2.2.8 Cumulative Impact AQ-7: Potential Conflict with or Obstruction of Implementation of an Applicable AQMP – Less than Cumulatively Considerable

**Cumulative Impact AQ-7** represents the potential of the proposed Project along with other cumulative projects to conflict with or obstruct implementation of an applicable AQMP.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The related projects would result in significant cumulative air quality impact if they result in population growth or operational emissions that exceed the assumptions in the AQMP. The related projects would be subject to regional planning efforts and applicable land use plans (such as the General Plan, Community Plans, or PMP) or transportation plans such as the Regional Transportation Plan and the Regional Transportation Improvement Program. Because the AQMP accounts for population projections that are developed by the Southern California Association of Governments, and accounts for planned land use and transportation infrastructure growth, the related projects would be consistent with the AQMP. Because of this, the related projects would not result in significant cumulative impacts related to an obstruction of the AQMP.

#### Contribution of the Proposed Project

The proposed Project would produce emissions of nonattainment pollutants. The 2007 AQMP proposes mobile source control measures and clean fuel programs that are designed to bring the South Coast Air Basin into attainment of the state and national ambient air quality standards. Many of these AQMP control measures are adopted as SCAQMD rules and regulations, which are then used to regulate sources of air pollution in the region. Proposed sources would have to comply with all applicable SCAQMD rules and regulations and in this manner, the Project would not conflict with or obstruct implementation of the AQMP. LAHD regularly provides the Southern California Association of Governments with its Port-wide forecasts of ocean-going vessels and harbor craft for development of the AQMPs. Therefore, the attainment demonstrations included in the 2003 and 2007 AQMPs account for the emissions generated by projected future growth at the Port. Because one objective of the proposed Project is to accommodate Port growth, the AQMP accounts for the proposed project development. As a result, the proposed Project would not make a cumulatively considerable

contribution to a significant impact in terms of conflicting with or obstructing implementation of an applicable AQMP.

### Mitigation Measures and Residual Cumulative Impacts

None are required because cumulative impacts would be less than significant. The proposed Project would not make a cumulatively considerable contribution to a significant impact.

### Project Alternatives

#### Alternatives 1 through 7

All sources of air emissions associated with construction and operations (no operations would occur under Alternative 6) under all alternatives would have to comply with all applicable SCAQMD rules and regulations and in this manner, the Alternatives 1 through 7 would not conflict with or obstruct implementation of the AQMP. As a result, Alternatives 1 through 7 would not make a cumulatively considerable contribution to a significant impact in terms of conflicting with or obstructing implementation of an applicable AQMP.

## 5.2.2.9 Cumulative Impact AQ-8: Potential Contribution to Global Climate Change – Cumulatively Considerable and Unavoidable

**Cumulative Impact AQ-8** represents the potential of the proposed Project along with other cumulative projects to contribute to global climate change.

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Scientific evidence indicates a trend of warming global surface temperatures over the past century due at least partly to the generation of greenhouse gases (GHG) emissions from human activities, as further discussed in Section 3.2 (Air Quality, Meteorology, and Greenhouse Gases). Some observed changes include shrinking glaciers, thawing permafrost, and shifts in plant and animal ranges. Credible predictions of long-term impacts from increasing GHG levels in the atmosphere include sea level rise, changes to weather patterns, changes to local and regional ecosystems including the potential loss of species, and significant reductions in winter snow packs. These and other effects would have environmental, economic, and social consequences on a global scale. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors (California Energy Commission, 2009). Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. According to the IPCC's Climate Change 2007 Synthesis Report (IPCC, 2007), global anthropogenic emissions of GHGs in 2004 were 49.0 gigatonnes of carbon dioxide equivalent ($CO_2e$). In California alone, $CO_2e$ emissions totaled approximately 483.88 million metric tons or 0.5 gigatonnes in 2004 (CARB, 2010). Based upon this information, past, current, and future global GHG emissions, including emissions from projects in the Port Complex (Table 5-1) and elsewhere in California, are cumulatively considerable. The proposed Project would be cumulatively considerable and would result in a cumulatively significant impact

## Contribution of the Proposed Project

The challenge in assessing the significance of an individual project's contribution to global GHG emissions and associated global climate change impacts is to determine whether a project's GHG emissions, which are at a micro-scale relative to global emissions, make a cumulatively considerable incremental contribution to a cumulatively considerable macro-scale impact. As noted above, $CO_2e$ emissions in California totaled approximately 483.88 million metric tons in year 2004 (CARB, 2010). As shown in Table 3.2-23, the proposed Project would produce higher GHG emissions after proposed Project completion compared to baseline levels. Any concurrent emissions-generating activity that occurs global-wide would add additional GHG emission burdens to these significant levels, which could further exacerbate environmental effects as discussed above and in Section 3.2, Air Quality, Meteorology, and Greenhouse Gases.

Considering Cumulative Impact AQ-8, which states that any GHG increase over the baseline is significant, emissions from proposed Project construction and operation would make a cumulatively considerable contribution to a significant cumulative impact in regards to global climate change.

## Mitigation Measures and Residual Cumulative Impacts

As shown in Table 3.2-26, with mitigation identified in Section 3.2.4.5, the proposed Project would produce higher GHG emissions in each future project year, compared to CEQA baseline levels. The way in which GHG emissions associated with the proposed Project or alternatives might or might not influence actual physical effects of global climate change cannot be determined. For these reasons, it is uncertain whether emissions from the proposed Project would contribute to a significant contribution to the impact of global climate change when considered with the emissions generated by human activity. Nevertheless, as discussed in Section 3.2, existing GHG levels are projected to result in changes to the climate of the world, with significant warming seen in some areas, which, in turn, will have numerous indirect effects on the environment and humans.

Project GHG emissions would contribute to existing levels and, therefore, would contribute to the causes of global climate change. Considering Cumulative Impact AQ-8, which states that any increase in GHG emissions over the baseline is significant, emissions from construction and operation of the proposed Project would make a cumulatively considerable contribution to a significant and unavoidable cumulative impact to global climate change.

## Project Alternatives

### Alternatives 1 through 7

Considering Cumulative Impact AQ-8, which states that any GHG increase over the baseline is significant, emissions from construction and operation (no operations would occur under Alternative 6) under Alternatives 1 through 7 would make a cumulatively considerable contribution to a significant cumulative impact in regards to global climate change. Mitigation measure would reduce this impact; however, the alternatives' contribution would continue to be cumulatively considerable and unavoidable.

# 5.2.3 Biological Resources

## 5.2.3.1 Scope of Analysis

The geographic region of analysis for biological resources differs by resource types such as birds, fish, marine mammals, plankton, and benthic invertebrates. The mobility of species in these groups, their population distributions, and the normal movement range for individuals living in an area varies so that effects on biotic communities in one area can affect those communities in other nearby areas. For terrestrial biological resources (excluding water-associated birds), the geographic region of analysis is limited to those land areas at the proposed Project site and extending approximately 1 mile (1.6 km) in all directions. The resources present are common species that are abundant throughout the region and are adapted to industrial areas in the Harbor.

For marine biological resources, excluding marine mammals, the geographical region of analysis for benthic communities, water column communities (plankton and fish), and water-associated birds is the water areas of the Los Angeles/Long Beach Harbor (inner and outer Harbor areas) because the basins, slips, channels, and open waters are hydrologically and ecologically connected. Effects on plankton are more restricted, however, but no distinct boundary can be established so the entire Harbor area is used. For marine mammals, the analysis area includes the Los Angeles-Long Beach Harbor as well as the Pacific Ocean from near Angels Gate out to Catalina Island in order to cover vessel traffic effects.

The special status species have differing population sizes and dynamics, distributional ranges, breeding locations, and life history characteristics. Because the bird species are not year-long residents but migrate to other areas where stresses unrelated to the proposed Project and other projects in the Harbor area can occur, the area for cumulative analysis is limited to the Harbor. Sea turtles are not expected to occur in the Harbor and their presence in the near-shore areas where vessel traffic could affect them is unlikely and unpredictable; consequently, these animals are not considered in the cumulative analysis.

Past, present, and reasonably foreseeable future development that could result in cumulative impacts on terrestrial resources are those projects that involve land disturbance such as grading, paving, landscaping, construction of roads and buildings, and related noise and traffic impacts. Noise, traffic, and other operational impacts can also be expected to have cumulative impacts on terrestrial species. Marine organisms could be affected by activities in the water, such as dredging, filling, wharf demolition and construction, and vessel traffic. Runoff of pollutants from construction and operations activities on land into Harbor waters via storm drains or sheet runoff also has the potential to affect marine biota, at least near the storm drains.

The significance criteria used for the cumulative analysis are the same as those used for the proposed Project in Section 3.3.4.2.

### 5.2.3.2 Cumulative Impact BIO-1: The proposed Project would contribute to a cumulative loss of individuals or habitat of a state or federally listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or the loss of federally listed critical habitat – Less than Cumulatively Considerable

**Cumulative Impact BIO-1** represents the potential of the proposed Project along with other cumulative projects to adversely affect state and federally listed endangered, threatened, rare, protected, or Species of Special Concern, or to result in the loss of designated critical habitat.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Construction of past fill projects in the Harbor has reduced the amount of marine surface water present and thus foraging and resting areas for special status bird species, but these projects have also added more land and structures that can be used for perching near the water. Construction of Terminal Island, Pier 300, and then Pier 400 provided new nesting sites for the California least tern, and the Pier 400 site is still being used. Shallow water areas to provide foraging habitat for the California least tern and other bird species have been constructed on the east side of Pier 300 and inside the San Pedro breakwater as mitigation for loss of such habitat from past projects, and more such habitat is to be constructed as part of the Channel Deepening Project. Established roosting areas for birds and the occasional harbor seal occur along the breakwaters, particularly the Middle Breakwater, which is isolated from human access. Impacts to special-status species as a result of marine habitat loss would not be cumulatively considerable and does not result in a significant cumulative impact.

Development of the vacant land in the southeast portion of Pier 400 adjacent to the California least tern nesting site (Plains All American Oil Marine Terminal Project [#10]) has the potential to adversely affect that species during construction; although the USFWS determined the project would not likely adversely affect the species given LAHD's incorporation of various minimization measures into the project design. Construction of the Cabrillo Shallow Water Habitat Expansion and Eelgrass Habitat Area as part of the Channel Deepening Project (#3) and Inner Cabrillo Beach Water Quality Improvement Program (#27) has the potential to adversely affect California least tern foraging during construction activities. Any significant impacts to the California least tern could be mitigated through timing of construction activities in areas used for foraging to avoid work when the California least terns are present. With respect to other special-status species, it is not expected that any nesting, foraging habitat, or individuals would be lost as a result of backland developments. For these reasons, impacts to the California least tern would not be cumulatively considerable and does not result in a cumulatively significant impact.

In-water/over-water construction activities (i.e., TraPac Terminal [#1], San Pedro Waterfront [#2], Channel Deepening [#3], Cabrillo Way Marina [#4], Evergreen Terminal [#5], Plains All American Oil Marine Terminal [#10], China Shipping Terminal [#14], YTI Terminal [#25], Yang Ming Terminal [#26], Inner Cabrillo Beach Water Quality Improvement Program [#24], APL Container Terminal [#29], Middle Harbor Terminal [#90], Piers G & J Redevelopment [#91], Pier S [#93], Schuyler F. Heim Bridge [#105], and Cerritos Channel Bridge[#107]) could disturb or cause special-status

birds, in addition to the California least tern addressed above, to avoid the construction areas for the duration of the activities. Because these projects would occur at different locations throughout the Harbor and only some are likely to overlap in time, the birds could use other undisturbed areas in the Harbor, and few individuals would be affected at any one time. Construction of the Schuyler F. Heim Bridge (#105) and Badger Bridge (#107), however, would have the potential to adversely affect the peregrine falcon if any are nesting at the time of construction. If nesting were to be affected, impacts could be significant but mitigable by scheduling the work to begin after the nesting season is complete. Cumulative impacts to other special-status bird species, including the peregrine falcon, would be less than significant.

In-water construction activities, and particularly pile driving, would also result in underwater sound pressure waves that could affect marine mammals, if they are present and persist in the area. Any seals or sea lions present in the Pier 300 Channel during construction would likely avoid the disturbance areas and thus would not be injured. The locations of these activities (i.e., pile and sheet pile driving) are in areas where few marine mammals occur. In addition, in-water construction of related projects (Plains All American Oil Marine Terminal [ 10], San Pedro Waterfront Project [#2], and APL Container Terminal [#29]) near the proposed Project could occur concurrently; however, concurrent construction activities in the Harbor are unlikely to have an adverse cumulative effect on the marine mammals, because ample area exists for any marine mammals that happen to be in the Harbor to move to avoid any disturbance and projects in close proximity are not expected to occur concurrently. As a consequence, construction of the related projects would not result in a significant cumulative impact to marine mammals.

## Contribution of the Proposed Project

As discussed in Section 3.3.4.3 (under Impact BIO-1), the proposed Project would neither result in a significant impact related to the loss of individuals or the reduction of existing habitat of a state or federally listed endangered, threatened, rare, protected, candidate, or sensitive species, or a species of special concern, nor would it otherwise result in a significant impacts to special-status species and marine mammals.

It is expected that marine mammals would voluntarily move away from the area at the commencement of the pile driving activities. The potential noise impacts associated with the proposed Project during pile driving would result in less than significant impacts to special status species and marine mammals. The distance between pile-driving activities associated with the proposed Project, and pile-driving activities associated with other nearby related projects in the Harbor (including the APL Container Terminal [#29]) is expected to be sufficiently large so as to minimize additive effects of piledriving on special status species and marine mammals. Possible concurrent pile driving activities are not expected to be cumulatively significant as ample area exists within the Harbor for these animals to move to avoid any disturbance caused by concurrent construction activities. Thus, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact related to in water noise impacts on marine mammals.

In-water construction, dredging, and creation of the CDFs would cause localized activity, noise, and turbidity that could affect birds and marine mammals. However, these impacts would be temporary and limited to the waters in the vicinity of construction activities. There are no related projects that could involve concurrent in-water construction in Fish Harbor, and thus, no cumulative impact would occur. Upon construction completion,

operational activity under the proposed Project would continue; operational activities would not result in the loss of habitat for rare, threatened, endangered, protected, or candidate species, or Species of Special Concern.

No impacts to critical habitat would occur because no critical habitat is present. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact BIO-1.

## Mitigation Measures and Residual Cumulative Impacts

The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1, 2, 3, 4, and 7

Under Alternatives 1 through 4 and 7, construction and operations would be similar to, or less intense than, the proposed Project. Therefore, Alternatives 1 through 4 and 7 would neither result in a significant impact related to the loss of individuals or the reduction of existing habitat of a state or federally listed endangered, threatened, rare, protected, candidate, or sensitive species, or a species of special concern, nor would it otherwise result in a significant impacts to special-status species and marine mammals or critical habitat. Therefore, Alternatives 1 through 4 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact BIO-1.

### Alternative 5

Under Alternative 5 the existing facility would be relocated to an alternate location within the Port. The alternate sites consist of previously disturbed/developed sites within the Port and the potential for sensitive species to occur at the new site in land and water is considered similar to that the proposed Project. Therefore, Alternative 5 is not anticipated to result in a significant impact related to the loss of individuals or the reduction of existing habitat of a state or federally listed endangered, threatened, rare, protected, candidate, or sensitive species, or a species of special concern, nor would it otherwise result in a significant impacts to special-status species and marine mammals or critical habitat. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact BIO-1.

### Alternative 6

Under Alternative 6 the facility would close, be demolished and the property returned to LAHD. There are no individuals or habitat of a state or federally listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or federally listed critical habitat within the Project area. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact BIO-1.

### 5.2.3.3 Cumulative Impact BIO-2: The proposed Project would not contribute to a cumulatively substantial reduction or alteration of state, federally, or locally designated natural habitats, special aquatic sites, or plant communities, including wetlands – Less than Cumulatively Considerable after Mitigation

**Cumulative Impact BIO-2** represents the potential of the proposed Project along with other cumulative projects to substantially reduce or alter state, federally, or locally designated natural habitats, special aquatic sites, or plant communities, including wetlands.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Essential Fish Habitat (EFH) has been and would be lost due to past, present, and future landfill projects in the Harbor. The EFH protection requirements began in 1996, and thus, only apply to projects since that time. The projects in Table 5-1 that could result in a loss of EFH include, TraPac Terminal (#1), Channel Deepening (#3), China Shipping Terminal (#14), APL Container Terminal (#29), Middle Harbor Terminal (#90), Piers G & J (#91), Schuyler Heim Bridge (#105), and Cerritos Channel Bridge(#107). The loss of EFH since 1996 is significant but mitigable, as the use of mitigation bank credits for the loss of marine habitat offset the losses of EFH. Temporary disturbances within EFH may also occur during in-water construction activities from cumulative related projects including: TraPac Terminal [#1], San Pedro Waterfront [#2], Channel Deepening [#3], Cabrillo Way Marina [#4], Evergreen Terminal [#5], Plains All American Oil Marine Terminal [#10], China Shipping Terminal [#14], YTI Terminal [#23], Yang Ming Terminal [#24], Inner Cabrillo Beach Water Quality Improvement Program [#28], APL Container Terminal [#29], Middle Harbor [#90], Piers G & J Redevelopment [#91], Pier S [#93], Schuyler F. Heim Bridge [#105], and Cerritos Channel Bridge[#107]. These disturbances in the Harbor occur at specific locations that are scattered in space and time within the Harbor. The concurrent construction activities at these sites are unlikely to increase impacts to EFH that would further degrade the habitat or ultimately result in significant increases in cumulative impacts since they will be relatively short in duration and dredge and other localized construction effects diminish rapidly with distance from the in-water activity. The related projects would not likely reduce or permanently alter EFH within the Harbor and therefore would not cause a significant cumulative impact to EFH. Increased vessel traffic and runoff from on-land construction and operations resulting from the cumulative projects would not result in a loss of EFH nor would these activities cumulatively alter or reduce this habitat.

Natural habitats, special aquatic sites (i.e., eelgrass beds, mudflats), and plant communities (wetlands) have a limited distribution and abundance in the Harbor. The prior 41-acre expansion of the Pier 300 backlands caused a loss of eelgrass beds that was previously mitigated. While recent marine habitat losses have been mitigated pursuant to inter-agency mitigation credit/debit systems, earlier losses of eelgrass, mudflats, and salt marsh from early landfill projects occurred as a result of the physical changes or development at the Port and are considered cumulatively considerable and does not result in a significant cumulative impact.

### Contribution of the Proposed Project

As discussed in Section 3.3, Biological Resources, there are no special aquatic habitats or other sensitive natural communities identified in the proposed Project area that would be affected by implementation of the proposed Project. Construction is not expected to affect subtidal eelgrass because the nearest documented eelgrass beds are located more than 1.3 miles from the Project site. Prior to dredging and in-water construction, eelgrass surveys would be conducted as required under the *Southern California Eelgrass Mitigation Policy* (NMFS, 1991 as amended). If eelgrass is found in the vicinity of any of the structures, a plan would be developed to ensure that there would be no net loss of eelgrass habitat, consistent with the policy.

There are no mudflats or marshes or special aquatic sites, or plant communities near the Project site that would be affected by proposed Project construction or operation. The construction of the CDFs would result in the permanent loss of 0.9 acres of EFH. Although this does not represent a substantial portion of the EFH present in the Port, any loss of EFH is considered significant. Thus, the proposed Project would make a cumulatively considerable contribution to a significant impact.

### Mitigation Measures and Residual Cumulative Impacts

The permanent loss of 0.9 acres of EFH would make a cumulatively considerable contribution to a significant cumulative impact. The implementation of mitigation measure **MM BIO-1**, which requires the application of 0.45 credits available in the Bolsa Chica or Outer Harbor mitigation banks to compensate for this loss, would reduce the proposed Project's contribution to less than cumulatively considerable.

### Project Alternatives

#### Alternatives 1, 5, 6 and 7

No special aquatic habitats or other sensitive natural communities would be affected by implementation of Alternatives 1, 5 through 7. The alternate site under Alternative 5 would be located within the working Port area and biological resources are expected to be similar to that of the proposed Project. No CDFs would be created under Alternatives 1, 5 through 7 and therefore EFH would not be lost. Therefore, Alternatives 1, 5 through 7 would not make a cumulatively considerable contribution to a significant impact.

#### Alternative 2, 3, and 4

As with the proposed Project, no special aquatic habitats or other sensitive natural communities would be affected by implementation of Alternatives 2 through 4. The relocation of the buildings under Alternative 3 would not affect aquatic habitat. However, the creation of the CDFs would result in the loss of 0.9 acres of EFH, which is considered a significant impact. The implementation of mitigation to compensate for this loss would reduce Alternatives 2 through 4's contribution to less than cumulatively considerable.

## 5.2.3.4 Cumulative Impact BIO-3: The proposed Project would not contribute to a cumulatively considerable interference with wildlife movement/migration corridors – Less than Cumulatively Considerable

**Cumulative Impact BIO-3** represents the potential of the proposed Project along with other cumulative projects to interfere with wildlife migration or movement corridors.

## Impacts of Past, Present, and Reasonably Foreseeable Future Projects

No known terrestrial wildlife or aquatic species migration corridors are present in the Harbor. Migratory birds pass through the Harbor area, and some rest or breed, such as the California least tern, in this area. Past, present, and reasonably foreseeable future related projects in the Harbor would not interfere with movement of these species because the birds are agile and would avoid obstructions caused by equipment and structures. Some species of fish move into and out of the Harbor during different parts of their life cycle or seasonally, but no identifiable corridors for this movement are known. Marine mammals migrate along the coast, and vessel traffic associated with the cumulative projects could interfere with their migration. However, because the area in which the marine mammals can migrate is large and the cargo vessels generally use designated travel lanes, the probability of interference with migrations is low.

The related projects would be developed on designated parcels in the urban environment and would not result in significant cumulative impacts to migration corridors.

## Contribution of the Proposed Project

As discussed in Section 3.3, Biological Resources, there are no known terrestrial wildlife migration corridors within the proposed Project area. The only defined migratory species in the Harbor are birds. Construction activities associated with the proposed Project would be in a localized and small portion of the Harbor area where the birds occur and the birds could easily fly around or over the work. Possible effects on fish species in the Harbor related to noise and water quality during construction, would be temporary, lasting for a few days at a time, and localized. The impacts are less than significant and there are no related projects that could involve concurrent in-water construction in Fish Harbor, and thus, no cumulative impact would occur.

There would be no physical barriers to movement, and the baseline condition for fish and wildlife access would be essentially unchanged under the proposed Project. Construction and operation of the proposed Project would not affect any migration or movement corridors in the Harbor or along the coast. Consequently, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact on wildlife migration or movement corridors.

## Mitigation Measures and Residual Cumulative Impacts

The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1, 2, 3, 6, and 7

Alternatives 1 through 3, and 6 and 7 would occupy the same location as the proposed Project which has no known terrestrial wildlife migration corridors, and, as with the proposed Project, construction and operation of Alternatives 1 through 3, 6, and 7 (operations would cease under Alternative 6) would not affect any migration or movement corridors in the Harbor or along the coast. Consequently, Alternatives 1 through 3, 6, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact on wildlife migration or movement corridors.

### Alternative 4

The boat shop construction and operations under Alternative 4 would occupy the same location as the proposed Project which has no known terrestrial wildlife migration corridors, and, as with the proposed Project, construction and operation of the boat shop facilities would not affect any migration or movement corridors in the Harbor or along the coast. The potentially historic buildings would be relocated to developed area within the San Pedro or Wilmington Waterfront, which is not within a known terrestrial wildlife migration corridor. The relocation would not affect aquatic resources. Consequently, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact on wildlife migration or movement corridors.

### Alternative 5

As with the proposed Project, the removal of operations at the Project site would not affect terrestrial wildlife migration corridors or any migration or movement corridors in the Harbor or along the coast. The alternate site would be located within the working port and not within a terrestrial migration or movement corridor. Similar to the proposed Project, neither construction nor operations would affect any migration or movement corridors in the Harbor or along the coast. Consequently, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact on wildlife migration or movement corridors.

## 5.2.3.5 Cumulative Impact BIO-4: The proposed Project would not contribute to a cumulatively considerable disruption of local biological communities – Less than Cumulatively Considerable

**Cumulative Impact BIO-4** represents the potential of the proposed Project along with other projects to cause a cumulatively substantial disruption of local biological communities (i.e., from the introduction of noise, light, or invasive species).

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

**Dredging and Wharf Work**. Construction of past projects in the Harbor has involved in-water disturbances such as dredging and wharf construction that removed surface layers of soft-bottom habitat as well as temporarily removed or permanently added hard substrate habitat (i.e., piles and rocky dikes). These disturbances altered the benthic habitats present at the location of the specific projects, but effects on benthic communities were localized and of short duration, as benthic and invertebrate communities are shown to recolonize quickly following dredging. Because these activities affected a small portion of the Harbor during any single episode, and recovery has occurred or is in progress, biological communities in the Harbor have not been substantially degraded. Similar construction activities and impacts (i.e., wharf construction/ reconstruction and dredging) would occur for these cumulative related projects that are currently under way and for some of those that would be constructed in the future, including the TraPac Terminal (#1), San Pedro Waterfront (#2), Channel Deepening Project (#3), Cabrillo Way Marina (#4), Evergreen Terminal (#5), Plains All American Oil Marine Terminal (#10), China Shipping (#14), YTI Terminal (#23), Yang Ming Terminal (#24), Inner Cabrillo Beach Water Quality Improvements (#27), APL Container Terminal (#29), Middle Harbor Terminal Redevelopment (#90), Piers G & J (#91), and Pier S (#93). Because recolonization of dredged areas and colonization of new

riprap and piles begins immediately and provides a food source for other species, such as fish, within a short time, multiple projects spread over time and space within the Harbor would not substantially disrupt benthic communities. Construction disturbances from related projects at specific locations in the water and at different times, which can cause fish and marine mammals to avoid the work area, are not expected to substantially alter the distribution and abundance of these organisms in the Harbor and thus would not substantially disrupt biological communities. Turbidity that results from in-water construction activities occurs in the immediate vicinity of the work and lasts during and for short durations after the activities that disturb bottom sediments. Effects on marine biota are thus localized to relatively small areas of the Harbor and of limited duration for each project. Those projects that are occurring at the same time but that are not nearby would thus not have additive effects.

Furthermore, based on biological baseline studies described in Section 3.3, the benthic marine resources of the Harbor have not declined during Port development activities occurring since the late 1970s. An assessment of dominant species in the Harbor indicates a gradient of increasing environmental stress (enrichment/contamination) from the Outer Harbor to Inner Harbor and from basins to slips (MEC and Associates, 2002). The most recent infaunal assessment documented relatively similar densities between Inner Harbor and Outer Harbor, but densities at shallow water stations were markedly higher than those in deeper water (SAIC, 2010). Over time, there has been an increasing tendency of movement of healthy Outer Harbor assemblages up the Main Channel and improved benthic indicators in the Inner Harbor areas (MEC and Associates, 2002; MBC, 2009; SAIC, 2010). While major dredging and filling activities within the harbor (including TraPac [#1], San Pedro Waterfront [#2], Cabrillo Way Marina [#4], Evergreen Improvements [#5], Plains All American Oil Marine Terminal [#10], Ultramar Lease Renewal Project [#11], China Shipping Terminal [#14], YTI [#23], Yang Ming [#24]) APL Container Terminal [#29], Middle Harbor Terminal Redevelopment [#90], Piers G & J [#91], and Pier S [#93]), can disturb benthic communities, recolonization of disturbed marine environments begins rapidly and is characterized by high production rates of a few colonizing species. However, establishment of a climax biological community could take several years.

Based on the above, dredging, wharf construction, and other in-water construction of the past, present, and reasonably foreseeable future projects would not result in significant cumulative impacts to the benthic community.

**Backland Construction and Operations.** Runoff from construction activities on land has reached Harbor waters at some locations during past project construction, particularly for projects implemented prior to the 1970s when environmental regulations were promulgated. The past projects included Pier 300, Pier 400, Pier J, and the remaining terminal land areas within the Los Angeles-Long Beach Harbor. Runoff also has the potential to occur during present and future projects (all projects in Table 5-1 because all drainage in the area containing the cumulative projects listed is ultimately to the Harbor). Construction runoff would only occur during construction activities, so that projects that are not concurrent would not have cumulative effects. Construction runoff would add to ongoing runoff from operation of existing projects in the Harbor at specific project locations and only during construction activities. For past, present, and future projects, the duration and location of such runoff would vary over time. Measures such as berms, silt curtains, and sedimentation basins are used to prevent or minimize runoff from construction, and this keeps the concentration of pollutants below thresholds that could measurably affect marine biota. Runoff from past construction projects (i.e., turbidity

and any pollutants) dissipated shortly after construction was completed or diminished as solids settled to the bottom sediments. For projects more than 20 years in the past, subsequent settling of suspended sediments has covered the pollutants, or the pollutants have been removed by subsequent dredging projects. Runoff from operation of these past projects continues, but it is regulated. Biological baseline surveys in the Harbor (MEC, 1988; MEC and Associates, 2002) have not shown any disruption of biological communities resulting from runoff. Further, the most recent major assessment, conducted in 2008, concluded that were no significant changes in habitat quality throughout the Harbor since 2000. In fact, based on studies summarized in Section 3.3, conditions in the Harbor Area have remained about the same or even improved between 1980 and 2008.

Effects of runoff from construction activities and operations would not substantially disrupt local biological communities in the Harbor, and as a consequence, past, present, and reasonably foreseeable future projects would not result in significant cumulative biological resource impacts related to runoff.

Much of the development in the Harbor has occurred and continues to occur on landfills that were constructed for that purpose. As a result, those developments did not affect terrestrial biota. Redevelopment of existing landfills to upgrade or change backland operations temporarily affected the terrestrial biota (i.e., landscape plants, rodents, and common birds) that had come to inhabit or use these industrial areas. Future cumulative developments such as hotels and other commercial developments on lands adjacent to the Harbor would be in areas that do not support natural terrestrial communities or are outside the region of analysis. Projects in Table 5-1 that are within the geographical region of analysis and could affect terrestrial biological resources include TraPac Terminal (#1), San Pedro Waterfront (#2), Channel Deepening Project (#3), Evergreen Terminal (#6), SSA Outer Harbor Fruit Facility Relocation (#9), Crescent Warehouse Company Relocation (#10), Ultramar Lease Renewal Project (#11), Pasha Terminal (#15), Interim Container Terminal (#16), South Wilmington Grade Separation (#20), Wilmington Waterfront Master Plan (#21), C Street/Figueroa Street Interchange (#22), Port Transportation Master Plan (#24), YTI Terminal (#23), Yang Ming Terminal (#24), APL Container Terminal (#29), Pier A East (#92), Schuyler Heim Bridge Replacement (#105), and Cerritos Channel Bridge(#107).

Based on this, past, present, and reasonably foreseeable future projects would not result in significant cumulative biological resource impacts related to upland development within the geographical scope.

**Vessel Traffic.** Cumulative marine terminal projects (i.e., TraPac Terminal [#1], San Pedro Waterfront [#2], Channel Deepening Project [#3], Evergreen Terminal [#5], Plains All American Oil Marine Terminal [#10], Ultramar Lease Renewal Project [#11], China Shipping Terminal [#14], Pasha Marine Terminal [#15], YTI Terminal [#23], Yang Ming Terminal [#24], APL Container Terminal [#29], Middle Harbor Terminal [#90], Piers G & J [#91], and Pier S [#93]) that involve vessel transport of cargo into and out of the Harbor have increased vessel traffic in the past and would continue to do so in the future. These vessels have introduced invasive exotic species into the Harbor through ballast water discharges and via their hulls. Ballast water discharges are now regulated so that the potential for introduction of invasive exotic species by this route has been greatly reduced. The potential for introduction of exotic species via vessel hulls has remained about the same, and use of antifouling paints and periodic cleaning of hulls to minimize frictional drag from growth of organisms keeps this source low. While exotic species are present in the Harbor, there is no evidence that these species have disrupted the biological

communities in the Harbor. Biological baseline studies conducted in the Harbor continue to show the existence of diverse and abundant biological communities. However, absent the ability to completely eliminate the introduction of new species through ballast water or on vessel hulls, it is possible that additional invasive exotic species could become established in the Harbor over time, even with these control measures. As a consequence, past, present, and reasonably foreseeable future projects would result in significant cumulative biological resource impacts related to the introduction of invasive species to Harbor water.

In addition, operation of the related projects would result in increased vessel traffic to and from the Port. There is the possibility, although remote, of accidental spills from one or more vessels that conceivably could release enough fuel into ocean waters to result in significant impacts to biological resources. Cumulative impacts to biological resources from vessel spills during operation of the related projects, therefore, are considered to be potentially significant.

## Contribution of the Proposed Project

Construction-related impacts on marine biological communities are expected to be temporary and confined to the area within Fish Harbor where the activity is taking place. These include physical disturbance, underwater and overwater noise, and turbidity produced during dredging/disposal activities, pile driving and removal, and other subtidal construction (such as installation of sheetpile walls). Therefore, no substantial disruption of biological communities would result from proposed Project construction, and the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

Resuspension of contaminants of concern during dredging could adversely affect aquatic organisms if toxic substances are present in sufficient concentrations. Required sediment testing and analyses prior to dredging/disposal, use of a silt curtain during dredging, and water quality monitoring and construction BMPs would further identify and then reduce the potential for these effects. Disposal of dredged sediments in the CDFs could result in smothering of fishes and invertebrates; however, these effects would be limited in extent and duration, and are not considered substantial. No other in-water construction projects are expected to occur concurrently within Fish Harbor, and thus, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

Runoff from temporary disturbance areas on land during construction of proposed Project backland facilities would add to the cumulative amount of construction runoff from all other projects in the Harbor that are being constructed concurrently with the proposed Project. Construction activities are closely regulated by state and local agencies, and runoff of pollutants in quantities that could adversely affect marine biota is not likely to occur. Furthermore, runoff from the proposed Project and most of the cumulative projects would not occur simultaneously but rather would be events scattered over time, so that total runoff to Harbor waters would be dispersed, in both frequency and location. Existing runoff and storm drain discharge controls, as well as conditions of all proposed Project-specific permits, would be implemented to control runoff during operations of the proposed Project. Thus, construction and operation of the proposed Project would not result in cumulatively considerable effects on biological communities, because runoff control measures would be implemented and maintained as required in project permits and contract specifications.

A remote potential exists for an accidental shipyard or vessel spill that could harm biological resources in the Harbor or ocean during proposed Project operation. Based on past operations, however, such a spill is unlikely to occur. Further, modernized runoff and storm drain discharge controls, as well as conditions of all proposed Project-specific permits, would be implemented should a spill occur, thereby minimizing potential impacts. Thus, construction and operation of the proposed Project would not result in cumulatively considerable effects on biological communities, because in the unlikely event of a spill, control measures would be implemented as required in project permits and contract specifications.

Operation of the proposed Project facilities is not expected to result in the introduction of non-native species into the Harbor via ballast water or vessel hulls. Many exotic species have already been introduced into the Harbor, and many of these introductions occurred prior to implementation of ballast water regulations. These regulations would reduce the potential for introduction of non-native species. Further, 60 percent of the vessels ALBS serves are already operating in the Port Complex and it would not substantially increase the number of vessels entering the Harbor.

Shade from construction vessels, and lights to support construction activities at night, would have temporary influences on the distribution of water column species. However, because construction activities and locations would be constantly changing, the effects would be similar to those that occur under normal Port operations with vessels constantly coming and going, and night lighting provided for Port operations. Thus, no substantial disruption to local biological communities would occur and the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

## Mitigation Measures and Residual Cumulative Impacts

The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1, 2, 3, and 6

Similar to the proposed Project, construction-related impacts on marine biological communities under Alternatives 1 through 3, and 6 are expected to be temporary and confined to the area within Fish Harbor where the activity is taking place, spills are unlikely to occur and should they happen control measures would be implemented as required in project permits and contract specifications, operations are not expected to result in the introduction of non-native species into the Harbor via ballast water or vessel hulls (operations would cease under Alternative 6), and shade and lighting would be similar to what occur under normal Port operations. Therefore, no substantial disruption to local biological communities would occur and Alternatives 1 through 3, and 6 would not make a cumulatively considerable contribution to a significant cumulative impact.

### Alternative 4

The boat shop construction and operations under Alternative 4 would occupy the same location as the proposed Project and would thus have similar impacts. The potentially historic buildings would be relocated to developed area within the San Pedro or Wilmington Waterfront, which is not expected to contain any biological communities that would be adversely impacted within a known terrestrial wildlife migration corridor. The relocation would not affect aquatic resources. Therefore, no substantial disruption to

local biological communities would occur and Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact.

#### Alternative 5

As with the proposed Project, the removal of operations at the Project site would not substantially disrupt local biological communities. The alternate site would be located within the working port and would not be expected to contain any biological communities that would be adversely impacted by construction or operations. Therefore, no substantial disruption to local biological communities would occur and Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact.

#### Alternative 7

Under Alternative 7 no in water construction would occur, and therefore there would be no construction-related impacts on marine biological communities. As with the proposed Project, operations under Alternative 7 are not expected to result in the introduction of non-native species into the Harbor via ballast water or vessel hulls. Shade and lighting would be similar to what occur under normal Port operations. Therefore, no substantial disruption to local biological communities would occur and Alternative 7 would not make a cumulatively considerable contribution to a significant cumulative impact.

### 5.2.3.6 Cumulative Impact BIO-5: The proposed Project would contribute to a cumulatively considerable and permanent loss of marine habitat – Less than Cumulatively Considerable after Mitigation

**Cumulative Impact BIO-5** represents the potential of the proposed Project along with other cumulative projects to result in a permanent loss of marine habitat.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Numerous landfill projects have been implemented in the Harbor since the Port Complex was first developed, and these projects have resulted in an unquantified loss of marine habitat. For the cumulative projects listed in Table 5-1, approximately 570 acres of landfill have been completed in the Harbor (Plains All American [#10] and Channel Deepening Projects [#3], 75 acres related to the Piers G & J [#91] and Pier S [#93] Projects, 65 acres of future planned projects that may include a landfilling element (Channel Deepening [#3], Berths 97–109 [#14], and Middle Harbor Terminal Redevelopment [#90]). Therefore, the cumulative total is approximately 700 acres of marine habitat that have been, or will be lost in the Port Complex. Losses of marine habitat prior to implementation of the agreements among LAHD, the Port of Long Beach, and other regulatory agencies (City of Los Angeles et al. 1984, 1997) were not mitigated. Losses since that time have been mitigated by use of existing mitigation bank credits from marine habitat restoration off site and through creation of shallow water habitat within the Outer Harbor as established in the agreements with the regulatory agencies.

The loss of habitat due to past projects, prior to the application of mitigation offsets or mitigation agreements, is unquantified; however, due to the level of development that has occurred, the past projects are assumed to have resulted in a significant cumulative impact that now constitutes the current baseline settings. The loss of habitat due to present and reasonably foreseeable future projects has been or would be mitigated by

offsets of mitigation bank credits. As a result, present, and reasonably foreseeable future projects would not result in additional significant cumulative impacts related to the loss of marine habitat.

#### Contribution of the Proposed Project

Construction of the proposed Project would include fill activities, or the disposal of sediment/dredged materials to create the CDF units. These activities would result in the direct loss of approximately 0.9 acre of marine habitat in the waters of Fish Harbor. Although the CDFs would be constructed in an area of Fish Harbor that is designated as "impacted" due to the presence of contaminated sediments, it is still considered EFH for the Coastal Pelagics and Pacific Groundfish and thus is considered a significant impact. This loss of marine habitat would make a cumulatively considerable contribution to a significant cumulative impact.

#### Mitigation Measures and Residual Cumulative Impacts

Mitigation measure **MM BIO-1** in Section 3.3, Biological Resources, would require the use of mitigation bank credits available in the Bolsa Chica or Outer Harbor mitigation banks to compensate for loss of fish and wildlife habitat. As described above, mitigation bank credits offset the loss of habitat due to present and reasonably foreseeable future projects, and thus, after mitigation, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

#### Project Alternatives

##### Alternatives 1, 5, 6, and 7

Under Alternatives 1, and 5 though 7, no CDFs would be constructed and therefore no loss of marine habitat would occur. Therefore, Alternatives 1, and 5 through 7 would not make a cumulatively considerable contribution to a significant cumulative impact.

##### Alternative 2, 3, and 4

Under Alternatives 2 though 4, CDFs would be constructed which, as with the proposed Project, would result in the loss of 0.9 acres of marine habitat. After implementation of mitigation to compensate for this loss, Alternatives 2 through 4 would not make a cumulatively considerable contribution to a significant cumulative impact.

## 5.2.4 Cultural Resources

### 5.2.4.1 Scope of Analysis

The geographic region of analysis for cumulative effects on cultural and paleontological resources related to Port projects varies on the type of resource. In general, areas situated on natural landforms within and surrounding the Port should be considered for the potential to encounter prehistoric archaeological resources as well as paleontological resources. This also includes portions of the natural landscape located within Harbor waters that may contain prehistoric and/or paleontological resources that have become submerged as a result of rising sea levels and/or dredging activities.

Historical archaeological resources and historic architectural resources may be found on both natural landforms and/or in fill/artificial soils. In addition, submerged cultural resources such as historic sailing vessels may be encountered within harbor waters. Impacts on prehistoric and historical archaeological resources as well as paleontological resources typically includes ground disturbance such as grading or dredging, while

impacts on the historic built environment typically result from modification, relocation, and demolition. Impacts on submerged historical archaeological resources, such as sunken ships, may also result from dredging and modification of the harbor. The significance criteria used for the cumulative analysis are the same as those used for the proposed Project in Section 3.4, Cultural Resources (Section 3.4.4.2).

### 5.2.4.2 Cumulative Impact CUL-1: The proposed Project would have a low potential to contribute to a cumulatively considerable impact involving disturbance, damage, or degradation of archaeological or ethnographic resources – Less than Cumulatively Considerable

**Cumulative Impact CUL-1** represents the potential of the proposed Project along with other projects to disturb, damage, or degrade listed, eligible, or otherwise unique or important archaeological or ethnographic resources that is found to be important under the CEQA criteria.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Archaeologists estimate that past and present projects within urban areas including the project vicinity have destroyed over 80 percent of all prehistoric sites without proper assessment and systematic collection of information beforehand. As prehistoric sites are non-renewable resources, the cumulative direct and indirect impacts of these actions are significant. Such projects have eliminated our ability to study sites that may have been likely to yield information important in prehistory. In other words, the vast majority of the prehistoric record has already been lost.

Construction activities (i.e., excavation, dredging, and land filling) associated with present and future Port projects, including TraPac Terminal (#1), San Pedro Waterfront (#2), Channel Deepening Project (#3), Cabrillo Way Marina (#4), Evergreen Terminal (#5), Plains All American Oil Marine Terminal (#10), Ultramar Lease Renewal Project (#11), China Shipping Terminal (#14), YTI Terminal (#23), Yang Ming Terminal (#24), Inner Cabrillo Beach Water Quality Improvements (#27), APL Container Terminal (#29), Middle Harbor Terminal Redevelopment (#90), Piers G & J (#91), Pier S (#93), would potentially require excavation. These activities, however, would be in areas of that were submerged before modern landmaking activities and imported/modern fill material, and therefore would not affect prehistoric or historical archaeological or ethnographic resources.

Although much of the area has been previously disturbed, there is the potential for other related upland Port projects including the San Pedro Waterfront Project (#2), South Wilmington Grade Separation (#20), Wilmington Waterfront Master Plan (#21), C Street/ Figueroa Street Interchange (#22), and I-110/SR-47 Connector Improvement Program (#26) on the periphery of the Port (i.e., in upland areas) to disturb unknown, intact subsurface prehistoric or historical archaeological resources. Reasonably foreseeable future projects within upland areas, including the Community of San Pedro (#39 through, #53), Community of Wilmington (#54 through #59), Harbor City, Lomita, and Torrance (#60 through #89), and City of Long Beach (#108 through #146), could disturb unknown, intact subsurface prehistoric or historical archaeological resources and potentially contribute to this impact. Therefore, impacts of these upland projects would result in a significant cumulative impact.

## Contribution of the Proposed Project

As discussed in Section 3.4.4.3, there are no archaeological or ethnographic resources are known to exist in the Project area. There is an extremely low potential for discovering archaeological or ethnographic cultural resources during surface disturbance activities because the ALBS site, and Terminal Island in general, is comprised of man-made (engineered) fill and extensively disturbed.

If Fish Harbor contained any important shipwrecks or other marine cultural resources, previous dredging and salvage of shipwrecks to ensure navigational safety have probably removed or reduced them to debris. Therefore, no important marine cultural resources are expected to occur within waters that would be affected during dredging or fill activities are anticipated. The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact CUL-1.

## Mitigation Measures and Residual Cumulative Impacts

Although Project-level impacts are not anticipated, **MM CUL-1**, as described in Section 3.4.4.3 (under Impact CUL-1), provides that work shall be immediately stopped and relocated from the area in the unlikely event that intact archaeological or ethnographic resources are encountered during construction. Prior to the implementation of **MM CUL-1**, impacts would be less than significant; however, **MM CUL-1** was added in the remote chance that previously unknown archaeological or ethnographic resources are encountered during construction. There are no known archaeological and ethnographic resources in the project area that would be significantly affected by the proposed Project; therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact to archaeological and ethnographic resources.

## Project Alternatives

### Alternatives 1, 2, 3, 6, and 7

Alternatives 1 through 3, 6, and 7 would occupy the same location as the proposed Project and thus have similar impacts. The contribution of Alternatives 1 through 3, 6, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact CUL-1.

### Alternative 4

The boat shop construction and operations under Alternative 4 would occupy the same location as the proposed Project and would thus have similar impacts. The potentially historic buildings would be relocated to an area within the San Pedro or Wilmington Waterfront, which is likely to have been previously disturbed and thus not likely to contain intact archaeological or ethnographic resources. However, should archaeological or ethnographic resources be uncovered, implementation of **MM CUL-1** would ensure that Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact to archaeological and ethnographic resources.

### Alternative 5

As with the proposed Project, the removal of operations at the Project site would not substantially disrupt local biological communities. The alternate site would be located within the working port in an area that has been previously disturbed and not likely to contain any archaeological and ethnographic resources. However, should archaeological or ethnographic resources be uncovered, implementation of **MM CUL-1** would ensure

that Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact to archaeological and ethnographic resources.

### 5.2.4.3 Cumulative Impact CUL-2: The proposed Project would result in a cumulatively significant adverse change in the significant of a historic architectural resource that reduced the integrity or significant of important resource on the site – Cumulatively Considerable and Unavoidable

**Cumulative Impact CUL-2** represents the potential of the proposed Project when combined with past, present, and reasonably foreseeable future projects to disturb structures that have been determined eligible for the California Register of Historic Places or the National Register of Historic Places, or otherwise considered unique or important historic architectural resources.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past projects within urban settings including the proposed Project area have involved demolition of significant historic architectural structures, most often without the benefit of their recordation (photographs and professional drawings) beforehand. Though each structure over 50 years old is not necessarily unique, historic buildings are capable of contributing to understanding events that have made a significant contribution to the broad patterns of history and/or may have been associated with the lives of persons significant in the past and/or may have been architecturally distinctive. Their destruction without proper recordation has minimized the ability to reconstruct the region's heritage. Proposed present and future Port projects requiring removal of significant or potentially significant historical architectural resources (i.e., demolition of structures over 50 years of age) such as the projects in listed below.

Proposed present and future projects requiring removal of significant or potentially significant historical architectural resources (i.e., demolition of structures over 50 years of age) include the Pan-Pacific Fisheries Cannery Buildings Demolition Project (#18), and Canner's Steam Demolition Project (#6), the Port of Long Beach Administration Building Replacement Project (#94), and the Southwest Marine Demolition Project (#25). The former Southwest Marine Shipyard facility, which includes Berths 243–245, contains structures which have been evaluated as NRHP eligible. A portion of the total facility, the Southwest Marine Historic District (former Bethlehem Shipyard facility), was found eligible for listing in the National Register of Historic Places in 2006 as the last remaining example of a highly significant World War II shipbuilding facility (LAHD, 2006). Under the Southwest Marine Buildings Demolition Project EIR, numerous buildings that are proposed for demolition were found to be contributing buildings to the National Register eligible district (the Bethlehem Shipyard Historic District).

Cumulative impacts associated with past, present, and reasonably foreseeable future projects regarding historical architectural resources would be cumulatively significant since these projects would include the removal of significant or potentially significant historical architectural resources.

#### Contribution of the Proposed Project

As discussed in Section 3.4.4.3, Project construction would require the demolition of six buildings on the site. Three of the six were determined to be potentially historic.

Building C1 is part of the Machine Shop Complex while the other two (Buildings A2 and A3) are part of the Office and Workshop Complex. The demolition of the three buildings represents a significant project impact to historic resources. The remaining portions of both historic building complexes (Buildings A-1 and C-2) would also be significantly impacted, as their partial demolition would destroy the integrity of each historical resource.

Although demolition of historic structures in the redevelopment area of the Project site is a Project specific impact there are other historic structures within the Project vicinity that have similar historical significance (i.e., locally significant for its association with the development of the Los Angeles shipbuilding and fishing industries between 1924 and 1959). As a result, the contribution of the proposed Project would make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact CUL-2.

## Mitigation Measures and Residual Cumulative Impacts

As described in Section 3.4, Cultural Resources, implementation of mitigation measures **MM CUL-2** and **MM CUL-3** (both associated with the recordation of the potential historical resources) would reduce the impacts to the Project's historic structures. These mitigation measures reduce Project level impacts, but not to a level of less than significant. No additional mitigation is available that would reduce impacts to less than significant on the Project-level.

## Project Alternatives

### Alternatives 1 and 3

Under Alternatives 1 and 3, the potentially historic buildings would be retained on-site. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact CUL-2.

### Alternative 2

Under Alternative 2, the number of potentially historic buildings to be removed would be less, and thus impacts on historic resources would be reduced under this alternative as compared to the proposed Project. However, the partial removal of any portion of either the Office/Workshop Complex or the Machine Shop Complex would result in a loss of integrity to the complex as a whole and, thus, a significant and unavoidable impact. After implementation of mitigation measure **MM CUL-2** and **MM CUL-3,** Alternative 2 would still make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact CUL-2.

### Alternatives 4 and 5

Under Alternatives 4 and 5, the potentially historic buildings would be relocated. Relocation of the buildings could lead to a loss of integrity of the structure, which would not eliminate the project impacts to historic resources. Implementation of mitigation measure **MM CUL-2** and **MM CUL-3** would still apply to this alternative. However, the implementation of mitigation would not fully mitigate impacts to less than significant. Therefore, Alternatives 4 and 5 would still make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact CUL-2.

### Alternatives 6 and 7

Under Alternatives 6 and 7, the potentially historic buildings would be demolished and impacts would be the same as for the proposed Project. After implementation of mitigation measure **MM CUL-2** and **MM CUL-3,** Alternatives 6 and 7 would make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact CUL-2.

## 5.2.4.4 Cumulative Impact CUL-3: The proposed Project would have low potential to contribute to a cumulatively considerable disturbance of paleontological resources - Less than Cumulatively Considerable

Cumulative Impact CUL-3 represents the potential of the proposed Project along with other cumulative projects to result in the permanent loss of, or loss of access to, a paleontological resource of regional or statewide significance.

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The number and percentage of significant paleontological resources in the proposed Project vicinity destroyed by past and present projects is difficult to determine. Geological formations in which important terrestrial vertebrate fossils may be found, however, have been substantially disturbed by urban development without systematic analysis by a professional paleontologist. There is the potential for unusual (i.e., because of their age, size, and/or condition) or previously unrecorded fossil species to be encountered within an urban project area. It is reasonable to expect that past excavation and construction projects have resulted in a substantial number of significant resources being destroyed without analysis. Their destruction without proper assessment has reduced the ability to reconstruct the region's fossil record. Further, the area near the Project site is underlain with man-made (engineered) fill and is paved or highly disturbed.

Construction activities (i.e., excavation, dredging, and land filling) associated with present and future Port projects, including TraPac Terminal (#1), San Pedro Waterfront (#2), Channel Deepening Project (#3), Cabrillo Way Marina (#4), Evergreen Terminal (#5), Plains All American Oil Marine Terminal (#10), Ultramar Lease Renewal Project (#11), China Shipping Terminal (#14), YTI Terminal (#23), Yang Ming Terminal (#24), Inner Cabrillo Beach Water Quality Improvements (#27), APL Container Terminal (#29), Middle Harbor Terminal Redevelopment (#90), Piers G & J (#91), Pier S (#93), would potentially require excavation. Construction activities associated with these projects would be on built land that would not contain natural fossil deposits, or in areas of historical estuaries containing sediments dating from recent geologic time (i.e., the last 10,000 years), after the time period when fossil materials would develop. Therefore, these projects would be located within areas that do not encompass potentially significant paleontological resources. Although much of the area has been previously disturbed, there is the potential for areas on or adjacent to natural landforms and other related upland Port projects on the periphery of the Port, including the San Pedro Waterfront Project (#2), South Wilmington Grade Separation (#20), Wilmington Waterfront Master Plan (#21), C Street/Figueroa Street Interchange (#22), and I-110/SR-47 Connector Improvement Program (#28) on the periphery of the Port (i.e., in upland areas) to disturb unknown paleontological resources.

Reasonably foreseeable future projects within upland areas that may affect paleontological resources include those in the Community of San Pedro (#39 through, #53), Community of Wilmington (#54 through #59), Harbor City, Lomita, and Torrance (#63 through #92), and City of Long Beach (#108 through #146). Such past, present, and foreseeable future projects may result in the destruction of paleontological resources. The impacts of each of these projects would result in a significant cumulative impact.

### Contribution of the Proposed Project

**Cumulative Impact CUL-3** represents the potential of the proposed Project along with other cumulative projects to result in the permanent loss of, or loss of access to, a paleontological resource of regional or statewide significance.

As discussed in Section 3.4.4.3, no paleontological resources are known to exist at the Project site or immediate vicinity. The majority of the Project site is underlain with man-made (engineered) fill and is paved or highly disturbed; therefore, the amount of surface disturbance would be limited within the Project site. Consequently, there would be an extremely low potential for paleontological resources to be found during construction, and impacts would not occur as a result of implementing the proposed Project. Therefore, the contribution of the proposed Project would not be cumulatively considerable under Cumulative Impact CUL-3 when combined with past, present, and reasonably foreseeable future projects.

### Mitigation Measures and Residual Cumulative Impacts

The incremental contribution of the proposed Project would be less than cumulatively considerable. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. As such, no mitigation measures are required.

### Project Alternatives

#### Alternatives 1 through 7

While the amount of excavation would vary under Alternatives 1 through 7, impacts associated with each would be similar to that of the proposed Project. Therefore, Alternatives 1 through 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact CUL-3.

# 5.2.5 Geology

## 5.2.5.1 Scope of Analysis

The geographic scope for cumulative impacts varies for geological resources, depending on the geologic issue. The geographic scope with respect to seismicity is the Port Complex because an earthquake capable of creating substantial damage or injury at the proposed Project site could similarly cause substantial damage or injury throughout this area that consists primarily of artificial fill, which is susceptible to liquefaction and differential settlement. The geographic scope with respect to tsunamis and sea level rise is the area of potential inundation due to a large tsunami or sea level rise, which could extend throughout the low-lying coastal areas of Los Angeles and Orange counties. The geographic scope with respect to subsidence/settlement, expansive soils, and unstable soil conditions would be confined to the proposed Project area because these impacts are site-specific and relate primarily to construction techniques. There is no geographic scope with respect to landslides, mudflows, and modification of topography or unique geologic

features because the Port area is generally flat, not subject to slope instability, and contains no unique geologic features. The geographic scope with respect to mineral resources is the Wilmington Oil Field, which includes the northern portion of Terminal Island, trending northwest-to-southeast, and mineral resource impacts relate primarily to potential loss of petroleum reserves in the Wilmington Oil Field.

Past, present, and reasonably foreseeable future developments that could contribute to cumulative impacts associated with geologic resources are those that involve the addition of new land area, infrastructure, and personnel that would be subject to earthquakes and tsunamis, or would preclude additional development of the Wilmington Oil Field.

All projects located in the Port Complex are subject to severe seismically induced ground shaking due to an earthquake on a local or regional fault. Structural damage and risk of injury as a result of such an earthquake are possible for the cumulative projects listed in Table 5-1, because they would involve existing or proposed structural engineering or on-site personnel.

The significance criteria used for the cumulative analysis are the same as those used for the proposed Project in Section 3.5, Geology. It was determined that no impact would occur under Impacts GEO-5, GEO-7, and GEO-8, and therefore, no cumulatively considerable contribution to a cumulative impact would occur and no cumulative analysis is required.

#### 5.2.5.2 Cumulative Impact GEO-1: The proposed Project would contribute to cumulatively considerable damage to structures or infrastructure, or exposure of people to substantial risk of injury from fault rupture, seismic ground shaking, liquefaction, or other seismically induced ground failure – Less than Cumulatively Considerable

**Cumulative Impact GEO-1** addresses the degree to which the proposed Project, along with other cumulative projects, places structures and/or infrastructure in danger of substantial damage or exposes people to substantial risk following a seismic event.

Southern California is recognized as one of the most seismically active areas in the United States. Since 1796, the region has been subjected to at least 52 major earthquakes of magnitude 6.0 or greater. Great earthquakes, like the 1857 San Andreas Fault earthquake, are quite rare in southern California. Earthquakes of magnitude 7.8 or greater occur at the rate of about two or three per 1,000 years, corresponding to a six to nine percent probability in 30 years. However, the probability of a magnitude 6.7 or greater earthquake in southern California in 30 years is 97 percent (Working Group on California Earthquake Probabilities, 2008). Therefore, it is reasonable to expect a strong ground motion seismic event during the lifetime of any proposed project in the region.

Ground motion in the region is generally the result of sudden movements of large blocks of the earth's crust along faults. Numerous active faults in the Los Angeles region are capable of generating earthquake-related hazards, particularly in the Harbor area, where the Palos Verdes Fault is present and hydraulic and alluvial fill are pervasive. Also noteworthy, due to its proximity to the site, is the Newport-Inglewood Fault, which has generated earthquakes of magnitudes ranging from 4.7 to 6.3 Richter scale (LAHD, 1991). Large events could occur on more distant faults in the general area, but the effects at the cumulative geographic scope would be reduced due to the greater distance.

Seismic ground shaking is capable of providing the mechanism for liquefaction, usually in fine-grained, loose to medium dense, saturated sands and silts. The effects of liquefaction may be excessive if total and/or differential settlement of structures occurs on liquefiable soils or bearing capacity is compromised by the sudden loss of frictional resistance beneath the foundation.

## Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past, present, and reasonably foreseeable future projects would not change the risk of seismic ground shaking. However, past projects have resulted in the backfilling of natural drainages at the Port with various undocumented fill materials. In addition, dredged materials from the Harbor area were spread across lower Wilmington from 1905 until 1910 or 1911 (Ludwig, 1927). In combination with natural soil and groundwater conditions in the area (i.e., unconsolidated, soft, and saturated natural alluvial deposits, artificial fill material, and naturally occurring shallow groundwater), backfilling of natural drainages and spreading of dredged materials associated with past development at the Port has resulted in conditions with increased potential for substantial damage to structures or infrastructure or expose people to substantial risk of injury due to liquefaction following seismic ground shaking.

In addition, past development has increased the amount of infrastructure, structural improvements, and the number of people working on-site in the Port Complex (i.e., the cumulative geographic scope). This past development has placed commercial, industrial, and residential structures and their occupants in areas that are susceptible to seismic ground shaking. Thus, these developments have had the effect of increasing the potential for seismic ground shaking to result in injury to people and damage to property.

With incorporation of modern construction engineering and safety standards and compliance with building codes adopted by the local regulatory bodies would minimize impacts due to seismically induced ground failure.

## Contribution of the Proposed Project

As discussed in Section 3.5.4.3, the proposed Project would not result in significant impacts relative to Cumulative Impact GEO-1. Because active faults are located near the Project area, and the area is mapped within an area of historic liquefaction, there is a potential for substantial risk of seismic impacts and subsequent potential to contribute to seismically induced ground shaking that could result in injury to people and damage to structures, because of the increase in the amount of structures and people working at the Project site, and therefore the Port. However, with incorporation of emergency planning and compliance with current building regulations, impacts due to seismically induced ground failure would be less than significant. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact related to seismic activity.

## Mitigation Measures and Residual Cumulative Impacts

The Port uses a combination of probabilistic and deterministic seismic hazard assessment for seismic design prior to implementing any construction projects. Structures and infrastructure planned for areas with high liquefaction potential must have installation or improvements comply with regulations to ensure proper construction and consideration for associated hazards. However, incorporation of modern construction engineering and safety standards would reduce impacts to less than cumulatively considerable in the event of a major earthquake. Therefore, the impact would not be cumulatively considerable.

#### Project Alternatives

##### Alternatives 1, 2, 3, 4, 5, and 7

Impacts associated with seismic events would be similar to that of the proposed Project. Therefore, with incorporation of emergency planning and compliance with current building regulations, impacts due to seismically induced ground failure would be less than significant, and Alternatives 1 through 5, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact related to seismic activity.

##### Alternative 6

Under Alternative 6, operations of the boat shop would cease, thereby the potential for substantial damage to structures or infrastructure or exposure of people to substantial risk of injury due to a seismic event is less than the proposed Project and therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact related to seismic activity.

### 5.2.5.3 Cumulative Impact GEO-2: The proposed Project would expose people and structures to cumulatively considerable risk involving tsunamis, or seiches – Less than Cumulatively Considerable

**Cumulative Impact GEO-2** addresses the degree to which the proposed Project, along with other cumulative projects, exposes people and structures to substantial risk from local or distant tsunamis, or seiches.

As has been shown historically, the potential loss of human life following a seismic event can be great if a large submarine earthquake or landslide occurs that causes a tsunami or seiche that affect a populated area. Tsunamis have also reportedly caused damage to moored vessels within the outer portions of the Harbor. Gasoline from damaged boats have caused a major spill in the Harbor waters and created a fire hazard following a seiche.

For on-site personnel, the risk of tsunami or seiches is a part of any ocean-shore interface, and hence personnel working in the cumulative effects area cannot avoid some risk of exposure. Similarly, berth infrastructure, cargo/containers, and tanker vessels would be subject to some risk of damage as well. However, the Port commissioned a detailed Tsunami Hazard Assessment for the Ports of Los Angeles and Long Beach (Moffatt and Nichol, 2007), which concluded that large earthquakes (Mw~7.5) are very infrequent and not every large earthquake is expected to generate a tsunami. The report also concluded that only about 10 percent of large earthquakes have the potential to generate a tsunami of some size. Furthermore, based on the seismicity, geodetics, and geology, a large locally generated tsunami from either local seismic activity or a local submarine landslide would probably not occur more than once every 10,000 years. Based on this report, the chances of a tsunami are very remote.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past, present, and reasonably foreseeable future projects would not change the risk of tsunamis, seiches, or sea level rise. However, past projects have resulted in the backfilling of natural drainages and creation of new low-lying land areas, which are subject to inundation by tsunamis, or seiches. In addition, past development has

increased the amount of infrastructure, structural improvements, and the number of people working on-site in the Harbor area. This past development has placed commercial and industrial structures and their occupants in areas that are susceptible to tsunamis, or seiches. However, due to the remote nature of the tsunamis or seiches in the Project area and the relative low water levels associated with the worst-case faulting scenario (Santa Catalina Fault – 7 Segments Scenario), which predicted shoreline tsunami water level at Fish Harbor ranges from 3.9 to 5.2 feet above MSL, the present and reasonably foreseeable future projects listed in Table 5-1, would not result in a significant cumulative impact.

## Contribution of the Proposed Project

As discussed in Section 3.5.4.3 under Impact GEO-2, tsunamis or seiches are typical risks for the entire California coastline and the risks of such events occurring would not be increased by construction or operation of the proposed Project. Under the worst-case local faulting scenario (Santa Catalina Fault – 7 Segments Scenario), the predicted shoreline tsunami water level at the Project site (Fish Harbor) ranges from 3.9 to 5.2 feet above MSL. Under theses worst-case scenarios (faulting and landslide), the maximum tsunami wave height would not likely breach the Project site. Further, under the proposed Project, the pier structures and the CDFs would be constructed to an elevation of approximately 14.8 feet MSL (12 feet MLLW) to allow for the site to drain inward towards to the new BMPs and other drainage structures. This would increase the MSL at the Project site from approximately 10.1 feet MSL to 14.8 feet MSL. Therefore, although the proposed Project would improve the site adjacent to the water's edge, no substantial risk of flooding from earthquake based tsunamis or seiches are likely at the Project site. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact related to a tsunami or seiche.

## Mitigation Measures and Residual Cumulative Impacts

The proposed Project would not result in substantial risk of flooding from earthquake based tsunamis and seiches. As discussed above, even during a seismic event similar to the worst-case scenario/simulation, the maximum tsunami wave levels would not breach the Project site. Therefore, the contribution of the proposed Project would be less than cumulatively considerable with respect to flooding and inundation impacts as a result of a tsunami or seiche and no mitigation measure would be required. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

## Project Alternatives

### Alternatives 1, 2, 3, 4, 6, and 7

Alternatives 1 through 4, 6, and 7 would occupy the same location as the proposed Project and thus, as with the proposed Project, would not result in substantial risk of flooding from earthquake based tsunamis or seiches. Therefore, Alternatives 1 through 4, 6, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact related to tsunamis or seiches.

### Alternative 5

Under Alternative 5, operations would be relocated to an alternate site within the Port. Potential risks associated with tsunamis or seiches are expected to be similar to that of the proposed Project site. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact related to seismic activity.

### 5.2.5.4 Cumulative Impact GEO-3: The proposed Project would not result in cumulative damage to structures or infrastructure or expose people to substantial risk of injury from subsidence/soil settlement – Less than Cumulatively Considerable

**Cumulative Impact GEO-3** addresses the degree to which the proposed Project, along with other cumulative projects, could result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury as a result of subsidence or soil settlement. In the absence of proper engineering, new structures could be cracked and warped as a result of saturated, unconsolidated/compressible sediments. The cumulative geographic scope is the same as the proposed Project site, because the effects of subsidence/settlement are site-specific and related primarily to construction techniques.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past projects on the site of the proposed Project site have required excavation and fill, and therefore have affected the risk of subsidence/settlement on the Project site. However, the past projects are no longer present on the Project site, and the subsurface conditions at the Project site represent baseline conditions. None of the related projects listed in Table 5-1 would be located at the Project site. As a consequence, part, present, and reasonably foreseeable future projects would not result in a significant cumulative impact related to subsidence or settlement.

#### Contribution of the Proposed Project

Settlement impacts in the proposed Project's backland areas would be less than significant because the proposed Project would be designed and constructed in compliance with the recommendations of the geotechnical engineer, consistent with Sections 91.000 through 91.7016 of the Los Angeles Municipal Code, and in conjunction with criteria established by LAHD and Caltrans, and would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. Because the proposed Project would result in less than significant (individual) impacts for Cumulative Impact GEO-3, and no other past (other than those projects on the proposed Project site), present, or reasonably foreseeable future projects that could contribute to a significant cumulative impact related to subsidence or settlement at the proposed Project site, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

#### Mitigation Measures and Residual Cumulative Impacts

The incremental contribution of the proposed Project would be less than cumulatively considerable. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. As such, no mitigation measures are required.

#### Project Alternatives

##### Alternatives 1, 2, 3, 4, 5, and 7

Impacts associated with subsidence/soil settlement would be similar to that of the proposed Project as any new construction would be designed and constructed in compliance with

the Los Angeles Municipal Code and in conjunction with criteria established by LAHD. Therefore, Alternatives 1 through 5, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact related to subsidence/soil settlement.

#### Alternative 6

Under Alternative 6, no new construction would occur, and thus there would be no impact related to the potential for subsidence/soil settlement. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact related to subsidence/soil settlement.

### 5.2.5.5 Cumulative Impact GEO-4: The proposed Project would not result in cumulative damage to structures or infrastructure or expose people to substantial risk of injury from soil expansion – Less than Cumulatively Considerable

**Cumulative Impact GEO-4** addresses the degree to which the proposed Project, along with other cumulative projects, results in substantial damage to structures or infrastructure or expose people to substantial risk of injury as a result of expansive soils. Expansive soil may be present in dredged or imported soils used for grading. Expansive soils beneath a structure could result in cracking, warping, and distress of the foundation. The cumulative geographic scope is the same as the proposed Project site, because the effects of expansive soils are site-specific and related primarily to construction techniques.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past projects at the ALBS could have contributed to fill and therefore potential risk of expansive soils, depending on the fill characteristics. However, the past projects are no longer present on the Project site and the subsurface conditions at the Project site represent baseline conditions. None of the related projects listed in Table 5-1 would be located at the Project site. As a consequence, past, present, and reasonably foreseeable future projects would not result in a significant cumulative impact.

#### Contribution of the Proposed Project

Expansive soil impacts in proposed Project backland areas would be less than significant because the proposed Project would be designed and constructed in compliance with the recommendations of the geotechnical engineer, consistent with implementation of Sections 91.000 through 91.7016 of the Los Angeles Municipal Code, and in conjunction with criteria established by LAHD and would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. Since the proposed Project may place structures on existing fill, compliance with applicable standards and policies of the Los Angeles Municipal Code would ensure that the proposed Project. In addition, no other past (other than those projects on the proposed Project site), present, or reasonably foreseeable future projects that could contribute to a significant cumulative impact related to subsidence or settlement at the proposed Project site. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

### Mitigation Measures and Residual Cumulative Impacts

The incremental contribution of the proposed Project would be less than cumulatively considerable. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. As such, no mitigation measures are required.

### Project Alternatives

#### Alternatives 1, 2, 3, 4, 5, and 7

Impacts associated with soil expansion would be similar to that of the proposed Project as any new construction would be designed and constructed in compliance with the Los Angeles Municipal Code and in conjunction with criteria established by LAHD. Therefore, Alternatives 1 through 5, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact related to soil expansion.

#### Alternative 6

Under Alternative 6, no new construction would occur, and thus there would be no impact related to the potential for soil expansion. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact related to soil expansion.

## 5.2.5.6 Cumulative Impact GEO-6: The proposed Project would not expose people or structures to cumulative risk related to encountering shallow groundwater during excavation, which would cause unstable collapsible soils – Less than Cumulatively Considerable

**Cumulative Impact GEO-6** addresses the degree to which the proposed Project, along with other cumulative projects, results in substantial damage to structures or infrastructure or expose people to substantial risk of injury as a result of collapsible or unstable soils.

Excavations that occur in natural alluvial and estuarine deposits, as well as artificial fill consisting of dredged deposits or imported soils, may encounter relatively fluid materials near and below the shallow groundwater table. Groundwater is locally present at depths ranging as shallow as 4.5 feet bgs. In the absence of proper engineering, new structures could be cracked and warped as a result of saturated, unstable, or collapsible soils, exposing building personnel to a safety hazard.

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The cumulative geographic scope is the same as the proposed Project site, because the effects of unstable soil conditions are site-specific and related primarily to construction techniques. Past projects on the site of the proposed Project site have contributed to fill and therefore risk of unstable soil conditions. However, the past projects are no longer present on the Project site and the subsurface conditions at the Project site represent baseline conditions. None of the related projects listed in Table 5-1 would be located at the Project site. As a consequence, past, present, and reasonably foreseeable future projects would not be cumulatively considerable and does not result in a significant cumulative impact.

### Contribution of the Proposed Project

Due to implementation of standard engineering practices regarding saturated, collapsible soils, people and structures on the proposed Project site would not be exposed to substantial adverse effects from soil excavation. In addition, the proposed Project site is constructed on landfill areas, and therefore impacts associated with shallow groundwater would be less than significant. Because the proposed Project would result in less than significant (individual) impacts for Cumulative Impact GEO-6, and no other past (other than those projects on the proposed Project site), present, or reasonably foreseeable future projects would cause significant cumulative impacts, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact related to landslides or mudflows.

### Mitigation Measures and Residual Cumulative Impacts

The incremental contribution of the proposed Project would be less than cumulatively considerable. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. As such, no mitigation measures are required.

### Project Alternatives

#### Alternatives 1 through 7

As with the proposed Project, Alternatives 1 through 7 would not expose people or structures to substantial adverse effects from soil excavation due to implementation of standard engineering practices regarding saturated, collapsible soils. Therefore, Alternatives 1 through 7 would not make a cumulatively considerable contribution to a significant cumulative impact related to soil excavation.

## 5.2.5.7 Cumulative Impact GEO-9: Construction and operation of the proposed Project in the Port area would not expose people and structures to substantial risk involving sea level rise. – Less than Cumulatively Considerable

**Cumulative Impact GEO-9** addresses the degree to which the proposed Project, along with other cumulative projects, exposes people and structures to substantial risk involving sea level rise.

Pursuant to CEQA Guidelines Section 15126.2, an EIR should evaluate any potential significant impacts of locating development in areas susceptible to hazard conditions identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazard areas. This analysis is required should the potential hazard be likely occur within the projected life of the Project and there is some degree of certainty associated with the risk associated with a potential hazard (California Natural Resources Agency, 2009). As discussed in Section 3.5.2.2.5, there is strong agreement among climate models on sea level projections through 2050; but models diverge after 2050 depending on the level of GHG emissions assumed. In addition, models suggest that sea levels along the California coast could rise substantially over the next century as a result of climate change. While this has not historically been a concern, LAHD will begin planning for and implementing strategies to address predicted sea level rise to minimize potential future adverse affects on Port operations and access.

## Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past, present, and reasonably foreseeable future projects would not change the risk of sea level rise. However, past projects have resulted in the backfilling of natural drainages and creation of new low-lying land areas, which are subject to sea level rise. In addition, past development has increased the amount of infrastructure, structural improvements, and the number of people working on-site in the Harbor area. This past development has placed commercial and industrial structures and their occupants in areas that are susceptible to sea level rise. While sea level rise has not historically been a concern, ongoing planning for and implementing strategies to address predicted sea level rise to minimize potential future adverse affects on present and reasonably foreseeable future projects listed in Table 5-1, would not result in a significant cumulative impact.

## Contribution of the Proposed Project

As discussed in Section 3.5.4.3 under Impact GEO-9, with implementation of the proposed Project, the new elevation at the top of the bulkhead would be approximately 12 feet MLLW. High tide is 7 feet MLLW, so a sea level rise of less than 5 feet (196.85 inches) would not directly impact the Project site. However, Seaside Avenue is at a lower elevation than the ALBS and Southwest Marine facilities; therefore, a sea level of less than 5 feet could impede landside access. The models predict that over the next century sea level could rise as much as approximately 6 feet (69 inches) and over the ALBS 30-year lease term (and beyond - through 2050), sea levels are predicted to rise by 1.5 feet (17 inches) or less. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact related to sea level rise.

## Mitigation Measures and Residual Cumulative Impacts

The proposed Project would not result in substantial risk from sea level rise. As detailed in Section 3.5, Geology, models predict that over the ALBS 30-year lease term (and beyond - through 2050), sea levels are predicted to rise by 1.5 feet or less. This is not expected to significantly impact the proposed Project. With implementation of the proposed Project, the new elevation at the top of the bulkhead would be approximately 12 feet MLLW. High tide is 7 feet MLLW, so a sea level rise of less than 5 feet would not directly impact the ALBS site. Therefore, the contribution of the proposed Project would be less than cumulatively considerable with respect to flooding and inundation impacts as a result of sea level rise and no mitigation measure would be required. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

## Project Alternatives

### Alternatives 1, 2, 3, 4, 6, and 7

Alternatives 1 through 4, 6, and 7 would occupy the same location as the proposed Project and thus, as with the proposed Project, would not result in substantial risk of flooding from sea level rise. Therefore, Alternatives 1 through 4, 6, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact related to sea level rise.

### Alternative 5

Under Alternative 5, operations would be relocated to an alternate site within the Port. Potential risks associated with sea level rise are expected to be similar to that of the proposed Project site. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact related to sea level rise.

## 5.2.6 Groundwater and Soils

### 5.2.6.1 Scope of Analysis

The geographic scope for cumulative impacts on groundwater and soils varies, depending on the impact. The geographic scope with respect to contaminated soils would be confined to the proposed Project site because these impacts are site-specific and relate primarily to potential exposure of contaminants to on-site personnel during construction and operation of the proposed Project. There is no geographic scope with respect to change in potable water levels and potential violation of regulatory water quality standards at an existing production well because there are no groundwater wells within a 2-mile radius. Similarly, there is no geographic scope with respect to potential reduction in groundwater recharge because the proposed Project site is not used for groundwater recharge. The LADWP is responsible for supplying water to the Project site and vicinity; local groundwater would not be utilized as a potable water supply.

Past, present, and reasonably foreseeable future developments that could contribute to cumulative impacts associated with groundwater and soils are limited to projects that would result in paving and potential reduction in groundwater recharge. See Section 3.6, Groundwater and Soils, with respect to potentially contaminated offshore sediments.

The cumulative area of influence is predominantly underlain by a shallow, unconfined aquifer (non-potable) (with an overlying shallow, perched, water-bearing zone of saline, non-potable water), which has historically occurred at depths as shallow as 5 feet bgs. This shallow aquifer is underlain by several major water-bearing zones. Spills of petroleum products and hazardous substances, due to long-term industrial land use, have resulted in contamination of some surface soils and shallow groundwater.

Hazardous materials refers to any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released. Hazardous materials that are commonly found in soil and groundwater include petroleum products, fuel additives, heavy metals, and volatile organic compounds. Depending on the type and degree of contamination that is present in soil and groundwater, any of several governmental agencies may have jurisdiction over investigation or remediation.

Most of the cumulative area of influence has been disturbed in the past, may contain buried contaminated soils, and is covered in impervious surfaces.

The significance criteria used for the cumulative analysis are the same as those used for the proposed Project in Section 3.6, Groundwater and Soils. It was determined that no impact would occur under Impacts GW-3, GW-4, and GW-5, and therefore, no cumulatively considerable contribution to a cumulative impact would occur and no cumulative analysis is required.

### 5.2.6.2 Cumulative Impact GW-1: The proposed Project construction activities may encounter toxic substances or other contaminants associated with historical uses of the Port, resulting in short-term exposure (duration of construction) to construction/operations personnel and/or long-term exposure to future site occupants – Less than Cumulatively Considerable

**Cumulative Impact GW-1** addresses the degree to which the proposed Project, along with other cumulative projects, results in exposing soils containing toxic substances and petroleum hydrocarbons associated with prior operations, which would be deleterious to humans. Exposure to contaminants associated with historical uses of the Project site could result in short-term effects (duration of construction) to construction workers, on-site personnel, and/or long-term impacts to future site occupants. The cumulative geographic scope is includes the proposed Project and immediate area because the effects of soil contamination are generally site-specific and consist primarily of the potential to expose on-site personnel to contaminants during construction or subsequent to construction.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past uses at the Port have contributed to soil and/or groundwater contamination, including sites that are at and adjacent to the proposed Project site as discussed in Sections 3.6.2.3 and 3.6.2.4, respectively. Remediation of much of the soil contamination has and is currently occurring, but some contamination remains, and is especially likely where those past activities occurred. Disturbance of contaminated soil would occur during construction activities, which could pose a risk of exposure to construction workers. However, each related project listed in Table 5-1 is subject to regulatory standards that must be achieved during construction and demolition activities, including compliance with Los Angeles RWQCB, DTSC, and LAFD regulations governing handling and cleanup of hazardous materials, and Cal EPA OEHHA worker safety requirements which would reduce potential impacts associated with exposing soil contamination. Further, as described above, the effects of soil contamination and groundwater are generally site-specific and thus not subject to Port-wide cumulative effects. Therefore, the related projects would not result in a significant cumulative impact.

#### Contribution of the Proposed Project

As discussed in Section 3.6.2.3, soil and/or groundwater contamination has been identified within the proposed Project. The contaminated soil would be remediated as part of the proposed Project. Grading and construction (e.g., excavations for utilities and foundations, demolition, development of new dry-dock area and buildings) in backland areas required for the proposed Project could potentially expose construction personnel, existing operations personnel, and future occupants of the site to historically contaminated soil and groundwater. Worker safety measures would be implemented to ensure that exposure levels established by the CalEPA OEHHA are complied with. The handling, transport, remediation, and/or disposal of all contaminated soil will be in accordance with all applicable federal, state, and local laws and regulations, compliance with the lead agency overseeing adherence to the RAP, and in accordance with the LAHD's

Site Remediation and Contamination Contingency Plan Lease Requirements which would result in a less than significant Project-level impact. Therefore, the proposed Project would not contribute to a cumulatively considerable impact related to exposing workers to toxic substances or other contaminants.

### Mitigation Measures and Residual Cumulative Impacts

The incremental contribution of the proposed Project would be less than cumulatively considerable. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. As such, no mitigation measures are required.

### Project Alternatives

#### Alternatives 1 through 7

Impacts associated with encountering toxic substances or other contaminants associated with historical uses of the Port, would be similar to that of the proposed Project, though somewhat less under Alternatives 1, 3 and 7 as the amount of excavation would less and somewhat greater under Alternatives 5 and 6 as the amount of excavation would be larger. Under Alternative 5, all of the alternate sites are within the working port, as with the proposed Project, all are likely to have some hazardous materials associated with past Port-related uses on-site or at adjacent properties. This may include soils and groundwater contamination and hazards materials related to the existing structures to be demolished such as ACBMs and lead paint (there are no existing structures at the East Basin site). Under each alternative, worker safety measures would be implemented and he handling, transport, remediation, and/or disposal of all contaminated soil will be in accordance with all applicable federal, state, and local laws and regulations. Therefore, Alternatives 1 through 7 would not contribute to a cumulatively considerable impact related to exposing workers to toxic substances or other contaminants.

## 5.2.6.3 Cumulative Impact GW-2: The proposed Project would not result in expansion of the area affected by movement, expansion, or increase in existing contaminants – Less than Cumulatively Considerable

**Cumulative Impact GW-2** addresses the degree to which the proposed Project, along with other cumulative projects, changes the rate or direction of movement of existing contaminants; expansion of the area affected by contaminants; or increased level of groundwater contamination, which would increase the risk of harm to humans. Potential remediation activities would result in the beneficial effect of removing soil contamination as a source of groundwater contamination. The cumulative geographic scope is the same as the proposed Project site, because the effects of soil contamination are site-specific in that they relate primarily to potential exposure of contaminants to on-site personnel during construction, or to on-site personnel or recreational users, subsequent to construction.

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past uses that have contributed to soil and/or groundwater contamination at the Project site have been identified, as discussed in Section 3.6.2.3. Much of the site contamination has been removed, but some contamination remains. With the exception of the proposed Project, present and reasonably foreseeable future projects would not be located on the

Project site and would have no effect on soil contamination on-site. Furthermore, the related projects in Table 5-1 would properly handle and manage any hazardous wastes encountered during their construction, which would result in less hazardous wastes present prior to their implementation. Therefore, the effects of past, present and reasonably foreseeable projects would not be cumulatively considerable and cumulatively significant.

## Contribution of the Proposed Project

As discussed in Section 3.6, groundwater and soil in limited and isolated portions throughout the proposed Project site have been impacted by hazardous substances and petroleum products as a result of spills during historic industrial land uses. The proposed Project is not expected to change the rate, direction, or extent of existing soil and/or groundwater contamination. Furthermore, as discussed under Cumulative Impact GW-1, if contamination were encountered during construction activities, it would be remediated prior to paving or capping the surface. The proposed Project would ultimately reduce the existing amount of soil and groundwater contamination caused by other past projects. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact (from past uses).

## Mitigation Measures and Residual Cumulative Impacts

The incremental contribution of the proposed Project would be less than cumulatively considerable. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. As such, no mitigation measures are required.

## Project Alternatives

### Alternatives 1, 2, 3, and 7

Alternatives 1 through 3, and 7 would occupy the same location as the proposed Project and thus have similar impacts. However, the amount of soil contamination to be removed from the site would be reduced under Alternatives 1 through 3, and 7 as compared to the proposed Project, and contaminated sediments would not be removed under Alternatives 1 through 3, and 7, which would reduce the benefits associated with clean up of legacy contaminants. Alternatives 1 through 3 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact GW-2.

### Alternative 4

The boat shop construction and operations under Alternative 4 would occupy the same location as the proposed Project and would thus have similar impacts. Relocation of the potentially historic buildings to an area within the San Pedro or Wilmington Waterfront would not affect the movement, expansion, or increase in existing contaminants. Should contamination be found at the relocation site, worker safety measures would be implemented and he handling, transport, remediation, and/or disposal of all contaminated soil will be in accordance with all applicable federal, state, and local laws and regulations, as well as mitigation requirements for site remediation as required by the environmental documentation for the redevelopment area (i.e., San Pedro Waterfront Project Final EIS/EIR [2009] or Wilmington Waterfront Project Final EIR [2009]. Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact GW-2.

#### Alternative 5

Removal of operations at the Project site would result in similar impacts as the proposed Project: however, a greater amount of contaminated soils would be removed. As with the proposed Project, the establishment of operations at an alternate site is not expected to change the rate, direction, or extent of soil and/or groundwater contamination that could potentially exist at an alternative location. Furthermore, if contamination were encountered during construction activities, it would be remediated prior to paving or capping the surface as with the proposed Project. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact GW-2.

#### Alternative 6

Removal of operations at the Project site would result in similar impacts as the proposed Project; however, a greater amount of contaminated soils would be removed. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact GW-2.

## 5.2.7 Hazards and Hazardous Materials

### 5.2.7.1 Scope of Analysis

The geographic scope for cumulative impacts associated with accidental spills, releases, or explosions of hazardous materials encompasses the overall Port Complex. The importance of regional projects diminishes as distance away from the Port Complex increases since the magnitude of potential impacts diminishes with greater distance from the Port Complex. Thus, past, present, and reasonably foreseeable future projects that could contribute to these cumulative impacts include those projects that transport hazardous materials in the vicinity of the Port Complex.

The significance criteria used for the cumulative analysis are the same as those used for the proposed Project in Section 3.7, Hazards and Hazardous Materials.

### 5.2.7.2 Cumulative Impact RISK-1: Compliance with Applicable Federal, State, Regional, and/or Local Security and Safety Regulations and/or Port Policies Guiding Port Development – Less than Cumulatively Considerable

**Cumulative Impact RISK-1** represents the potential of the proposed Project when combined with past, present, and reasonably foreseeable future projects to fail to comply with applicable regulations and policies guiding development within the Port.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

All related projects within the Port area are required to comply with applicable development regulations and policies. All related projects within the Port's boundaries are also required to be consistent with the PMP, or be subject to approved amendments to the PMP in order to accommodate the project. Therefore, the cumulative impacts of past, present, and reasonably foreseeable future projects would be less than cumulatively significant and not cumulatively considerable.

#### Contribution of the Proposed Project

As discussed in Section 3.7.4.3, the proposed Project and any other Port project would be subject to applicable federal, state, and local laws and regulations governing the spill prevention, storage, use, and transport of hazardous materials, as well as emergency response to hazardous material spills, thus minimizing the potential for adverse health and safety impacts. Compliance with all applicable hazardous waste laws and regulations and PMP requirements concerning hazards would help ensure the safe development and operation of the expanded ALBS. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact RISK-1 when combined with past, present, and reasonably foreseeable future projects.

#### Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measure would be required.

#### Project Alternatives

##### Alternatives 1 through 7

As with the proposed Project, Alternative 1 through 7 would be subject to applicable federal, state, and local laws and regulations governing the spill prevention, storage, use, and transport of hazardous materials, as well as emergency response to hazardous material spills, thus minimizing the potential for adverse health and safety impacts. Therefore, Alternatives 1 through 7 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact RISK-1.

### 5.2.7.3 Cumulative Impact RISK-2: The proposed Project would not cumulatively increase the probable frequency and severity of consequences to people or property from accidental exposure to health hazards – Less than Cumulatively Considerable

**Cumulative Impact Risk-2** represents the risk associated with the proposed Project along with other cumulative projects to substantially increase the frequency and severity of consequences to people or property from accidental exposure to health hazards.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

All past, present, and reasonably foreseeable related projects that would involve the handling of hazardous materials would be subject to the same or similar BMPs as the proposed Project and would be constructed in accordance with the Los Angeles Municipal Code (Chapter 5, Section 57, Division 4 and 5; Chapter 6, Article 4) or similar jurisdictional requirements. Quantities of hazardous materials that exceed the thresholds provided in Chapter 6.95 of the California Health and Safety Code would be subject to a Release Response Plan (RRP) and a Hazardous Materials Inventory (HMI). Implementation of increased inventory accountability and spill prevention controls associated with this RRP and HMI, such as limiting the types of materials stored and size of packages containing hazardous materials, would limit both the frequency and severity of potential releases of hazardous materials, thus minimizing potential health hazards

and/or contamination of soil or water during demolition and construction activities. These measures reduce the frequency and consequences of spills by requiring proper packaging for the material being shipped, limits on package size, and thus potential spill size, as well as proper response measures for the materials being handled. Implementation of these preventative measures would minimize the potential for spills to impact members of the public and limit the adverse impacts of contamination to a relatively small area. As a consequence, construction of the related projects would not result in substantial increases in the frequency or severity of hazardous materials spills, and would not be cumulatively considerable and does not result in a significant cumulative impact.

Past, present, and the reasonably foreseeable future projects listed in Table 5-1 have and would continue to generate truck trips that travel throughout the Port. According to a U.S. Department of Transportation (USDOT) Federal Motor Carrier Safety Administration (FMCSA) detailed analysis (2010), the estimated non-hazardous materials truck accident rate (which is more than twice the hazardous materials truck accident rate) is 0.73 accidents per million vehicle miles traveled. Based on data from the National Highway Traffic Safety Administration (NHTSA), of the estimated 380,000 truck crashes in 2008 (causing fatalities, injuries, or property damage), an estimated 10.7 percent (4,066 of the total 380,000 truck crashes) produced fatalities and 17.4 percent (66,000 of the total 380,000 truck crashes) produced injuries (USDOT, 2010). The Fatality Analysis Reporting System (FARS) and the Trucks Involved in Fatal Accidents (TIFA) survey were the sources of data for this analysis, which primarily examined fatalities associated with vehicle impact and trauma.

Although the related projects would result in increases in truck trips in the Port, beyond baseline conditions, the truck trip increases are not expected to result in increases in the probable frequency and/or severity of consequences, because all vehicles are subject to traffic laws and restrictions, weight and speed limits, designated truck routes, and cargo packaging and labeling requirements. The Port is currently developing a Port-wide transportation master plan (TMP) for roadways in and around its facilities. Present and future traffic improvement needs are being determined based on existing and projected traffic volumes. The results will be a TMP providing ideas on what to expect and how to prepare for future traffic volumes. Some of the transportation improvements under consideration include: I-110/SR-47/Harbor Boulevard interchange improvements; south Wilmington grade separations; and additional traffic capacity analysis for the Vincent Thomas Bridge and I-110 connector roads. In addition, the Port is working on several strategies to increase rail transport, which will reduce reliance on trucks. These projects would serve to reduce the frequency of truck accidents.

The Port is currently phasing out older trucks as part of its Clean Truck Program, and the Transportation Worker Identification Credential (TWIC) program will help identify and exclude truck drivers that lack the proper licensing and training. The phasing out of older trucks would reduce the probability of accidents that occur as a result of mechanical failure by approximately 10 percent (ADL, 1990). In addition, proper driver training, or more specifically, the reduction in the number of drivers that do not meet minimum training specifications, would further reduce potential accidents by approximately 30 percent.

Furthermore, as part of the Clean Air Action Plan (CAAP), the Port will be implementing measures and requirements that will result in truck fleet improvements (i.e., requiring newer trucks that meet certain USEPA standards), which would have the effect of phasing out older trucks and replacing them with newer trucks (POLA and POLB, 2010).

Consequently, as the truck fleet composition changes or improves over time, improvements to the accident frequencies and severity rates should also improve. Based on above and the engineering improvements to the transportation system in the Port area, the related projects would not be cumulatively considerable and does not result in a significant cumulative impact related to an increase in the probable frequency and severity of harm from truck accidents

## Contribution of the Proposed Project

As discussed in Section 3.7.4.3, the proposed Project site contains known and potentially unknown contamination related to past uses and other uses in the project vicinity; however, these areas are not expected to pose an exposure risk to the public or to the environment under the proposed Project. Construction and operation of the proposed Project would not involve the handling of significant amounts of hazardous materials beyond those needed for construction equipment and activities, and normal boat building/maintenance operations. Furthermore, with the implementation of BMPs and compliance with the state and federal requirements for the transport, handling, and storage of any hazardous materials would minimize the potential for an accidental release of hazardous materials and/or explosion during construction and operation of the proposed Project. Therefore, the incremental contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact RISK-2 when combined with past, present, and reasonably foreseeable future projects.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1, 2, 3, and 7

Alternatives 1 through 3, and 7 would occupy the same location and have similar, though slightly reduced, operations as the proposed Project and thus would have similar impacts. However, the amount of soil contamination to be removed from the site would be reduced under Alternatives 1 through 3, and 7 as compared to the proposed Project, and contaminated sediments would not be removed under Alternatives 1 and 7, which would reduce the benefits associated with clean up of legacy contaminants. Alternatives 1 through 3, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact RISK-2.

### Alternative 4

The boat shop construction and operations under Alternative 4 would occupy the same location as the proposed Project and would thus have similar impacts. The buildings proposed for relocation to an area within the San Pedro or Wilmington Waterfront may contain regulated building materials including ACMs/ACBMs, LBPs, PCBs, and other chemicals. These regulated materials and chemicals would be managed or otherwise abated prior to relocation. Because of this, these known hazardous materials are not expected to be released during relocation, and would therefore not pose a potentially significant impact to workers or increase the probable frequency and severity of consequences to people or property from accidental exposure to health hazards.

Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact RISK-2.

#### Alternative 5

Removal of operations at the Project site would result in similar impacts as the proposed Project; however, a greater amount of contaminated soils would be removed. As with the proposed Project, the establishment of operations at an alternate site is not expected to increase the probable frequency and severity of consequences to people or property from accidental exposure to health hazards. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact RISK-2.

#### Alternative 6

Removal of operations at the Project site would result in similar impacts as the proposed Project, however a greater amount of contaminated soils would be removed and operations would cease. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact RISK-2.

### 5.2.7.4 Cumulative Impact RISK-3: Interference with an Existing Emergency Response or Evacuation Plan or Requiring a New Emergency or Evacuation Plan – Less than Cumulatively Considerable

**Cumulative Impact RISK-3** represents the potential of the proposed Project when combined with past, present, and reasonably foreseeable future projects to substantially interfere with an existing emergency response or evacuation plan or require a new emergency or evacuation plan, thereby increasing the risk of injury or death.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The proposed related projects within the Port that would have an impact on emergency response or evacuation plans would be subject to approval by LAHD and the City and would be subject to the conditional approval of these agencies. Similarly, related projects in adjacent jurisdictions would be subject to the conditional approval of the respective agencies. Therefore, projects that would impact applicable emergency response or evacuation plans would not be approved without appropriate measures to address emergency services, as applicable. Thus, past, present and reasonably foreseeable future projects would not be cumulatively considerable and does not result in a significant cumulative impact.

#### Contribution of the Proposed Project

As discussed in Section 3.7.4.3, the contractor would coordinate with the agencies responsible for the Emergency response and evacuation planning: the LAPD, LAFD, Port Police, and USCG. Construction and demolition activities would be subject to emergency response and evacuation systems implemented by LAFD. In addition, the proposed Project would continue to operate as a boat shop and operations would be confined to the Project site and would not result in blockages of roads or routes that can be used for evacuations. Therefore, the proposed Project operations would not interfere with any existing emergency response or emergency evacuation plans or increase the risk

of injury or death. As such, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact RISK-3 when combined with past, present, and reasonably foreseeable future projects.

#### Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. No mitigation measures are required.

#### Project Alternatives

##### Alternatives 1 through 7

Potential impacts associated with emergency response or evacuation plans under Alternatives 1 through 7 (no operations would occur under Alternative 6) would be similar to that of the proposed Project. Therefore, Alternatives 1 through 7 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact RISK-3.

### 5.2.7.5 Cumulative Impact RISK-4: The proposed Project would not result in a substantial increase in public health and safety concerns as a result of the accidental release, spill, or explosion of hazardous materials due to a tsunami — Less than Cumulatively Considerable

**Cumulative Impact RISK-4** represents the potential of the proposed Project along with other cumulative projects to not comply with applicable regulations and policies guiding development within the Port.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

As discussed in Section 3.5, Geology, there is the potential for a large tsunami to affect the Port. A large tsunami could lead to fuel spills if moored vessels are present at or in the vicinity of ALBS. While in transit to ALBS or another past, present, or reasonably foreseeable future project, the hazards posed to tankers are insignificant, and in most cases, imperceptible. However, while docked, a tsunami striking the Port could cause significant ship movement and even a hull breach if the ship is pushed against the wharf.

The Port is subject to diurnal tides, meaning two high tides and two low tides during a 24-hour day. The average of the lowest water level during low tide periods each day is typically set as a benchmark of 0 feet and is defined as MLLW. For purposes of this discussion, all proposed Project structures and land surfaces are expressed as height above (or below) MLLW. The MSL in the Port is +2.8 feet above MLLW (NOAA, 2011). This height reflects the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch (19 years) and, therefore, reflects the mean of both high and low tides in the Port. The recently developed Port Complex model described in Section 3.5.2.2.3 (in Section 3.5, Geology) predicts tsunami wave heights with respect to MSL, rather than MLLW and, therefore, can be considered a reasonable average condition under which a tsunami might occur. The Port MSL of +2.8 feet must be considered in comparing projected tsunami run-up (i.e., amount of wharf overtopping and flooding) to proposed wharf height and topographic elevations, which are measured with respect to MLLW.

A reasonably foreseeable scenario for generation of a tsunami in the San Pedro Bay Ports includes the recently developed Port Complex model, which predicts tsunami wave heights at various locations around the Port Complex under both earthquake and landslide scenarios.

The most likely worst-case tsunami scenario was based partially on a magnitude 7.6 earthquake on the offshore Santa Catalina fault. The recurrence interval for a magnitude 7.5 earthquake along an offshore fault in the southern California Continental Borderland is about 10,000 years. Similarly, the recurrence interval of a magnitude 7.0 earthquake is about 5,000 years, and the recurrence interval of a magnitude 6.0 earthquake is about 500 years. However, there is no certainty that any of these earthquake events would result in a tsunami, because only about 10 percent of earthquakes worldwide result in a tsunami. In addition, available evidence indicates that tsunamigenic landslides would be extremely infrequent and occur less often than large earthquakes. This suggests recurrence intervals for such landslide events would be longer than the 10,000-year recurrence interval estimated for a magnitude 7.5 earthquake (Moffatt and Nichol, 2007). As noted above, the probability of the worst-case combination of a large tsunami and extremely high tides would be less than once in a 100,000-year period.

Containers of hazardous substances on ships or on berths could similarly be damaged as a result of a large tsunami. Such damage could result in releases of both hazardous and non-hazardous cargo to the environment, adversely affecting persons and/or the marine waters. However, containers carrying hazardous cargo would not necessarily release their contents in the event of a large tsunami. The LADOT regulations (49 CFR Parts 172 through 180) covering hazardous material packaging and transportation would minimize potential release volumes because packages must meet minimum integrity specifications and size limitations.

The owner or operators of tanker vessels are required to have an approved Tank Vessel Response Plan on board and a qualified individual in the U.S. with full authority to implement removal actions in the event of an oil spill incident, and to contract with the spill response organizations to carry out cleanup activities in case of a spill. The existing oil spill response capabilities in the Port are sufficient to isolate spills with containment booms and recover the maximum possible spill from an oil tanker.

Designing new facilities based on existing building codes might not prevent substantial damage to structures from coastal flooding as a result of tsunamis (and in some locations seiches). Impacts due to seismically induced tsunamis are typical for the entire California coastline, however, the probability of a major tsunami occurring is classified as "improbable" (less than once every 10,000 years), as discussed in Section 3.5, Geology. The potential consequence of such an event is classified as "moderate", resulting in a Risk Code of 4, which is "acceptable". Although the related projects would result in additional Port facilities adjacent to or near Harbor waters that could be subject to a tsunami, there is a low probability and the risks are considered acceptable, and thus, would not be cumulatively considerable and does not result in a significant cumulative impact.

## Contribution of the Proposed Project

As discussed in Sections 3.5.4.3 under Impact GEO-2 (in Section 3.5, Geology), and further in Section 3.7.4.3 (in Section 3.7, Hazards and Hazardous Materials), the potential is very low for a major tsunami to occur that would cause the kind of results predicted in the tsunami hazard assessment. In the unlikely event of a tsunami, the potential

consequences of such accidents would be small due to the localized, short-term nature of the releases. Under the worst-case scenarios (faulting and landslide), the maximum tsunami wave height is not anticipated to breach the Project site. Considering the low risk of inundation or flooding and the measures in place, construction and operational activities under the proposed Project would not therefore, lead to an accidental release, spill, or explosion of hazardous material(s) during construction or operational activities. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact RISK-4 when combined with past, present, and reasonably foreseeable future projects.

#### Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

#### Project Alternatives

##### Alternatives 1, 2, 3, 4, 6, and 7

Alternatives 1 through 4, 6, and 7 would occupy the same location as the proposed Project and thus, impacts associated with a tsunami-caused accidental release, spill, or explosion of hazardous material(s) would be similar to the proposed Project. Therefore, Alternatives 1 through 4, 6 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact related Cumulative Impact RISK-4.

##### Alternative 5

Under Alternative 5, operations would be relocated to an alternate site within the Port. Potential risks associated tsunami are expected to be similar to that of the proposed Project site and would be taken into account for project design and construction. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact related to seismic activity.

### 5.2.7.6 Cumulative Impact RISK-5: The proposed Project would not result in a cumulatively considerable increase in the likelihood of a spill, release, or explosion of hazardous materials due to a terrorist action – Less than Cumulatively Considerable

**Cumulative Impact RISK-5** represents the potential of the proposed Project along with other cumulative projects to result in an accidental spill as a result of a terrorist action.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Potential impacts due to terrorism are characteristic of the entire Los Angeles and Long Beach metropolitan area. Terrorism risk can be based on simple population-based metrics (i.e., population density) or event-based models (i.e., specific attack scenarios). Willis et al. (2005) evaluated the relative merits and deficiencies of these two approaches to estimating terrorism risk, and outlined hybrid approaches of these methods. Overall, the results of the terrorism risk analysis characterized the Los Angeles/Long Beach metropolitan area as one of the highest-risk regions in the country. Using population metrics, the Los Angeles/Long Beach region was ranked either first or second in the country, while the event-based model dropped the Los Angeles/Long Beach region to the

5th ranked metropolitan area, mainly due to the relative lack of attractive, high-profile targets (i.e., national landmarks or high profile, densely populated buildings). Using various approaches and metrics, the Los Angeles/Long Beach region represented between 4 and 11 percent of the U.S. terrorism risk.

Historical experience provides little guidance in estimating the probability of a terrorist attack on a container vessel or onshore terminal facility. For a container terminal importing large numbers of containers from countries that may be considered unfriendly, the perceived threat of a terrorist attack is a primary concern of the local population. Sinking a cargo ship in order to block a strategic lane of commerce actually presents a relatively low risk, in large part because the targeting of such attacks is inconsistent with the primary motivation for most terrorist groups (i.e., achieving maximum public attention through inflicted loss of life). Sinking of a ship would likely cause greater environmental damage due to spilled fuel, but this is generally not a goal of terrorist groups.

However, at the national level, potential terrorist targets are plentiful, including those having national significance, those with a large concentration of the public (i.e., major sporting events, mass transit, skyscrapers, etc.), or critical infrastructure facilities. Currently, the United States has more than 500 chemical facilities operating near large populations. U.S. waterways also transport more than 100,000 annual shipments of hazardous marine cargo, including LPG, ammonia, and other volatile chemicals. All of these substances pose hazards that far exceed those associated with a container terminal.

The Port of Los Angeles is one of the world's largest trade gateways, and the economic contributions to the regional and national economy are substantial. Cumulative container throughput continues to grow in importance on a national level, the Port Complex already represents a substantial fraction of national container terminal throughput, and by default, an attractive economic terrorist target. Given the relative importance of the Port Complex under baseline conditions, cumulative growth would not be expected to materially change the relative importance as a potential terrorist target.

Intermodal cargo containers could also be used to transport a harmful device into the Port Complex intended to cause harm to the Ports. This could include a weapon of mass destruction or a conventional explosive. The likelihood of such an attack would be based on the desire to cause harm to the port, with potential increases in cumulative Port Complex infrastructure or throughput having no measurable effect on the probability of an attack. Additionally, the use of cargo containers to smuggle weapons of mass destruction through the Port Complex intended to harm another location such as a highly populated and/or economically important region is another possible use of a container by a terrorist organization. The consequences associated with the smuggling of a terrorist weapon would depend, in part, on the nature of the device or material, but could be substantial in terms of impacts to the environment and public health and safety, especially if it were a mass destruction device. However, the consequences of a WMD attack would not be affected by cumulative growth at the Port Complex; rather, the consequences would depend on the composition and type of device or material, how a terrorist intends to use the device, and to what aim he or she intends to accomplish, the time of day, the surrounding population or property density, or any number of other non-Port throughput-related factors. To reiterate, the likelihood of a terrorist event would not be affected by cumulative infrastructure growth or throughput increases at the Port Complex, but would be based on the outcome that the terrorists desired. Cargo containers handled as part of the container terminal related projects represent only one of many potential methods to smuggle weapons of mass destruction, and with current security initiatives may be less

desirable than other established smuggling routes (i.e., land-based ports of entry, cross border tunnels, and illegal vessel transportation).

Because there are no measurable and/or definitive links between the related projects, including container throughput, and the probability of a terrorist attack is small, the related projects would not be cumulatively considerable and does not result in a significant cumulative impact related to increased probability of a terrorist attack.

#### Contribution of the Proposed Project

As discussed in Section 3.7.4.3, the probability of a terrorist attack is unlikely to change during construction of the proposed improvements or operation compared to baseline conditions since improvements would primarily be made within the existing ALBS site. The existing Port security measures would continue to provide security in the Fish Harbor area and other areas throughout the Port. Existing Port security measures, as well as ALBS site security measures, would counter any potential increase in unauthorized access to Fish Harbor or the boat shop through the use of vehicles or vessels. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact RISK-5.

#### Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

#### Project Alternatives

##### Alternatives 1 through 7

Under Alternatives 1 through 7, impacts associated with a terrorist action would be the same as the proposed Project, though reduced under Alternative 6 as operations would cease. Therefore, Alternatives 1 through 7 would not make a cumulatively considerable contribution to a significant cumulative impact related Cumulative Impact RISK-5.

## 5.2.8 Land Use

### 5.2.8.1 Scope of Analysis

Since the proposed Project has the capacity to affect the environment within the Port and surrounding communities, the region of analysis for cumulative land use impacts includes the Port and extends to adjacent areas, including the communities of Wilmington and San Pedro. The Wilmington and San Pedro communities would be assessed in terms of their compatibility with the already existing Port industrial uses.

### 5.2.8.2 Cumulative Impact LU-1: The proposed Project would be consistent with the adopted land use/density designation in the Community Plan, redevelopment plan, or specific plan for the site – Less than Cumulatively Considerable

**Cumulative Impact LU-1** represents the potential of the proposed Project along with other cumulative projects to result in development that would be inconsistent with land use/density designations in land use plans that govern buildout within the proposed Project area.

## Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past actions within the proposed Project vicinity have been subject to the land use/density designations stipulated in the PMP, the Port of Los Angeles Plan, other applicable Plans, and the zoning code. The PMP has been certified by the Coastal Commission and past development projects have been approved pursuant to the adopted PMP, ensuring compliance with the coastal zone management program (POLA, 1979). The City-approved Port of Los Angeles Plan and other Community Plans are the governing documents that regulate the continued development and operation of the Port. Parcel zoning designations control the land use types and densities that can be constructed on a given parcel. Over the years, the Port has developed consistent with the PMP, the Port of Los Angeles Plan, and site zoning, thereby ensuring consistency with land use/density designations to minimize impacts on surrounding areas. Similarly, existing facilities within with the proposed Project vicinity have been modified as necessary to ensure proposed land use/density designations are consistent with their respective land use plan and site zoning designations.

Construction and operation associated with past, present, and reasonably foreseeable future projects, including the TraPac Terminal (#1), San Pedro Waterfront Project (#2), the Channel Deepening Project (#3), the Evergreen Container Terminal (#5), the Plains All American Oil Marine Terminal, (#10), the Ultramar Lease Renewal Project (#11), China Shipping Terminal (#14), Wilmington Waterfront Master Plan (#21), YTI Container Terminal (#23), Yang Ming Container Terminal (#24), and APL Container Terminal (#29), and have been, and would continue to be, modified during the project review process to ensure consistency with the Port of Los Angeles Plan (or other Community Plan) and/or PMP land use/density designations, and with site zoning designations. Because of this, past, present, and reasonably foreseeable future projects would not be cumulatively considerable and does not result in a significant cumulative impacts related to land use designations inconsistencies.

## Contribution of the Proposed Project

As discussed in Section 3.8.4.3 (in Section 3.8, Land Use), the Project site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. No changes to the existing zoning would occur, and no additional uses would be added to the site that conflict with the existing zoning. The Project would be consistent with the adopted zoning for the site. However, a new zoning designation would be established for the land created by the CDFs. The zoning designation would be established for the land created by the CDF units through an amendment to the PMP. The new zoning would be the same as the existing zoning designation of [Q]M3-1 (Heavy Industrial Zone, Height District 1). As with the existing zoning designation, all uses that would occur on the new land would be consistent with the M3 zoning designation. The proposed Project would be consistent with the adopted zoning for the site. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-1.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

### Project Alternatives

#### Alternatives 1 and 7

Under Alternatives 1 and 7, as with the proposed Project, the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. No conflict with the existing zoning or land use designation would occur. Therefore, Alternatives 1 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-1.

#### Alternatives 2 and 3

Under Alternatives 2 and 3 the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. No conflict with the existing zoning would occur or land use designation would occur. However, a PMP amendment would be required to establish zoning for the CDFs as with the proposed Project. Therefore, Alternatives 2 and 3 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-1.

#### Alternative 4

Under Alternative 4 the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. No conflict with the existing zoning would occur. However, a PMP amendment would be required to establish zoning for the CDFs as with the proposed Project. The potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront. No new use is proposed for the buildings and thus no conflict with zoning or land use designation is anticipated. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-1.

#### Alternative 5

Under Alternative 5, operations would be relocated to an alternate site and the existing site would be vacated. The alternate sites are all located within the Port and within the Industrial ([Q]M3-1) zoned area, and thus no conflict with the existing zoning or land use designation would occur. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-1.

#### Alternative 6

Under Alternative 6, all of the existing infrastructure and structures on the site would be removed and operations would cease, no conflict with the zoning or land use designation would occur. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-1.

## 5.2.8.3 Cumulative Impact LU-2: The proposed Project would be consistent with the General Plan or adopted environmental goals or policies contained in other applicable plans – Less than Cumulatively Considerable

**Cumulative Impact LU-2** represents the potential of the proposed Project along with other cumulative projects to result in development that would be inconsistent with environmental goals and policies delineated in land use plans that govern buildout within the proposed Project area.

## Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past actions within the proposed Project vicinity have been subject to the goals and objectives delineated in the Port of Los Angeles Plan, the PMP, and the respective land use plan. The City-approved Port of Los Angeles Plan is the governing document that regulates the continued development and operation of the Port and is consistent with the PMP. Over the years, the Port has developed consistent with the Port of Los Angeles Plan objectives that give priority to water-dependent developments to ensure the Port is maintained as an important local, regional, and national resource, as well as coordinating development of the Port and adjacent communities as stipulated in the Wilmington-Harbor City Community Plan and the San Pedro Community Plan. Similarly, present projects within the proposed Project vicinity have been developed to ensure proposed developments are consistent with Port of Los Angeles Plan, PMP, and/or applicable land use plan policies.

Construction and operation associated with past, present, and reasonably foreseeable future projects, including Berth 136-147 TraPac Terminal (#1), San Pedro Waterfront Project (#2), China Shipping Terminal (#14), Channel Deepening Project (#3), Evergreen Terminal (#5), Plains All American Oil Marine Terminal, (#10), Ultramar Lease Renewal Project (#11), Wilmington Waterfront Master Plan (#21), YTI Terminal (#23), Yang Ming Terminal (#24), and APL Container Terminal (#29) have been, or will continue to be, modified during the project review process to ensure consistency with the Port of Los Angeles Plan, the PMP, and applicable land use plans and policies. Because of this, past, present, and reasonably foreseeable future projects would not be cumulatively considerable and does not result in a significant cumulative impact related to plan inconsistencies.

## Contribution of the Proposed Project

As discussed in Section 3.8.4.3, the proposed Project would be consistent with the identified uses in the PMP on a long-term basis. An amendment to the PMP would be required to incorporate the land created by the CDF units. The addition of this new land to facilitate the expansion of the existing boat repair operations would be consistent with the goals and policies of the PMP. Because the PMP serves as the LCP for the Coastal Commission, the proposal would be consistent with the California Coastal Act of 1976. The proposed Project would be consistent with other applicable objectives, policies, and programs contained in the Port of Los Angeles Plan, Los Angeles Plan Element of the City's General Plan, State Tidelands Trust, and the San Pedro Community Plan. The proposed Project would be consistent with all applicable SCAG policies, such as the Regional Comprehensive Plan and Guide developed by SCAG and with the Regional Housing Needs Assessment. The proposed Project would also be consistent with the industrial short- and long-range preferred uses identified in the PMP for Area 8, Fish Harbor, which encompasses the Project site. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-2.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

### Project Alternatives

#### Alternatives 1 and 7

Under Alternatives 1 and 7, as with the proposed Project, the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. No conflict with the PMP or other applicable plans would occur. Therefore, Alternatives 1 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-2.

#### Alternatives 2 and 3

Under Alternatives 2 and 3 the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. However, a PMP amendment would be required to establish zoning for the CDFs as with the proposed Project. With the PMP amendment, no conflict with the PMP or other applicable plans would occur. Therefore, Alternatives 2 and 3 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-2.

#### Alternative 4

Under Alternative 4the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. No conflict with the existing zoning would occur. However, a PMP amendment would be required to establish zoning for the CDFs as with the proposed Project. The potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront. No new use is proposed for the buildings and thus no conflict with the PMP or other applicable plans is anticipated. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-2.

#### Alternative 5

Under Alternative 5, operations would be relocated to an alternate site and the existing site would be vacated. The alternate sites are all located within the Industrial ([Q]M3-1) zoned area of Port and thus no conflict with the PMP or other applicable plans is anticipated. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-2.

#### Alternative 6

Under Alternative 6, all of the existing infrastructure and structures on the site would be removed and operations would cease, no new land use impacts would occur and, thus, no conflict with the PMP or other applicable plans would occur. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-2.

## 5.2.8.4 Cumulative Impact LU-3: The proposed Project would not substantially affect the types and/or extent of existing land uses in the Project area – Less than Cumulatively Considerable

**Cumulative Impact LU-3** represents the potential of the proposed Project along with other related projects to cumulatively effect the types and/or extent of existing land uses in the Project area.

## Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past actions within the proposed Project vicinity have been subject to the goals and objectives delineated in the Port Plan and the PMP, the General Plan for the City, and site zoning. The City-approved Port Plan is the City's governing document that regulates the continued development and operation of the Port. Parcel zoning designations control the land use types and densities that can be constructed on a given parcel. Over the years, the Port has developed consistent with the PMP, the Port Plan, and site zoning, thereby ensuring consistency with land use/density designations established to minimize potential land use incompatibilities on surrounding areas. Similarly, existing facilities within the proposed Project vicinity have been modified as necessary to ensure proposed land use/density designations are consistent with their respective land use plan and site zoning designations. Because maintaining consistency with plans is an inherent outcome of the permitting process, past, present, and reasonably foreseeable future projects would not adversely impact the types and/or extent of existing land uses in the Project area.

Consequently, past, present, and reasonably foreseeable future projects would not cause substantial changes to the types or extent of land uses in the geographical scope, and cumulative significant impacts would not occur.

## Contribution of the Proposed Project

As stated in Section 3.8.4.3, short-term construction-related Project impacts would not affect the future use of the Project site or its current land use or zoning designations. Project construction would be temporary and would not permanently impact any of the existing or proposed uses on the site. The proposed Project would be consistent with the identified uses in the PMP on a long-term basis. An amendment to the PMP would be required to incorporate the land created by the CDF units. The addition of this new land to facilitate the expansion of the existing boat repair operations would be consistent with existing uses and would not substantially affect the types and/or extent of existing land uses in the Project area. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-3.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1 and 7

Under Alternatives 1 and 7, as with the proposed Project, the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. Alternatives 1 and 7 would thereby be consistent with existing uses and would not substantially affect the types and/or extent of existing land uses. Therefore, Alternatives 1 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-3.

### Alternatives 2 and 3

Under Alternatives 2 and 3 the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. Alternatives 2 and 3 would

thereby be consistent with existing uses and would not substantially affect the types and/or extent of existing land uses. Further, as with the proposed Project the creation of CDFs would not result in a significant land use conflict. Therefore, Alternatives 2 and 3 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-3.

#### Alternative 4

Under Alternative 4 the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue, which remain consistent with existing uses and would not substantially affect the types and/or extent of existing land uses. The potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront. No new use is proposed for the buildings and thus no land use conflict is anticipated. However, relocation to an industrial zoned area is unlikely, as the buildings would more likely be relocated to a redevelopment area consisting of commercial, open space, and tourist serving uses. Should future uses for the buildings be established, they would be consistent with the existing zoning district and surrounding uses. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-3.

#### Alternative 5

Under Alternative 5, operations would be relocated to an alternate site and the existing site would be vacated. The alternate sites are all located within an industrial area Port and thus no land use conflict is anticipated. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-3.

#### Alternative 6

Under Alternative 6, all of the existing infrastructure and structures on the site would be removed and operations would cease, no new land use impacts would occur. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-3.

### 5.2.8.5 Cumulative Impact LU-4: The proposed Project would not cause secondary impacts to surrounding land uses - Less than Cumulatively Considerable

**Cumulative Impact LU-4** represents the potential of the proposed Project along with other cumulative projects to result in secondary impacts on surrounding land uses. Specifically, the secondary impacts of concern include effects on residential property values in the cumulative geographic scope related blighted conditions in communities adjacent to the Port and activities at the Port or substantial unanticipated growth.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

While proximity of the Port and nearby industrial areas may historically have led to lower residential property values in communities nearest the Port compared to more affluent communities in southern Los Angeles County, such as Redondo Beach and Rancho Palos Verdes, residential property values in communities near the Port have grown over the last decade and do not exhibit depreciated or stagnant values. The recent housing market slump has led to decreased property values throughout California, a trend mirrored in the

study area and the nearby communities. Thus, the incremental development of past and present projects has not contributed to decreased property values.

Additionally, the LAHD is in the process of implementing a number of actions designed to enhance community quality of life and to provide public access to visually stimulating and historically relevant developments within and adjacent to the Port. This includes the CAAP program and other policies and programs aimed at improving environmental quality in the surrounding communities, and the San Pedro and Wilmington waterfront development projects. Objectives of the San Pedro Waterfront Project and Wilmington Waterfront Project include increasing public access and pedestrian connectivity to the waterfront; increasing visitor-serving commercial and recreational development; and enhancing vehicular access to, from, and within the waterfront. The Wilmington Waterfront Project also includes specific objectives focused on improving the local economy and economic sustainability of the community. The environmental programs and waterfront development projects are anticipated to improve the quality of life and local economy.

Additionally, construction and operation of waterfront development projects and other projects associated with present and reasonably foreseeable future projects, such as the TraPac Container Terminal (#1), San Pedro Waterfront Project (#2), , Channel Deepening Project (#3), Evergreen Terminal (#5), Plains All American Oil Marine Terminal (#10), China Shipping Terminal (#14), Pasha Marine Terminal (#15), YTI Terminal (#23), Yang Ming Terminal (#24),and APL Container Terminal (#29) would result in increased jobs. However, it is likely that the new employees would come from the local Los Angeles area, and thus, would not contribute to substantial increase or decrease in property values within surrounding communities that could in turn result in physical land use changes. As a consequence, past, present, and reasonably foreseeable future projects would not be cumulatively considerable and does not result in a significant cumulative impacts related to secondary land use impacts, including substantial unanticipated growth or blight.

## Contribution of the Proposed Project

As discussed in Section 3.8.4.3, the proposed Project would not introduce new land uses and is consistent with existing, surrounding land uses. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-4.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1 and 7

Under Alternatives 1 and 7, as with the proposed Project, the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. Alternatives 1 and 7 would not introduce new land uses and is consistent with existing, surrounding land uses. Therefore, Alternatives 1 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-4.

### Alternatives 2 and 3

Under Alternatives 2 and 3 the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. Alternatives 2 and 3 would thereby not introduce new land uses and is consistent with existing, surrounding land uses. Further, as with the proposed Project the creation of CDFs would not result in a significant land use conflict. Therefore, Alternatives 2 and 3 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-4.

### Alternative 4

Under Alternative 4 the site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue, and thus Alternative 4 would not introduce new land uses and would be consistent with existing, surrounding land uses. The potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront. No new use is proposed for the buildings and thus no land use conflict is anticipated. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-4.

### Alternative 5

Under Alternative 5, operations would be relocated to an alternate site and the existing site would be vacated. The alternate sites are all located within an industrial Port and thus no land use conflict is anticipated. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-4.

### Alternative 6

Under Alternative 6, all of the existing infrastructure and structures on the site would be removed and operations would cease, no new land use impacts would occur. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact LU-4.

## 5.2.9 Noise

### 5.2.9.1 Scope of Analysis

For the purposes of cumulative noise impact analysis, the area of influence includes those sensitive receptors closest to the proposed Project site, which might potentially be affected by construction noise or noise associated with traffic generated by the proposed Project or an alternative and sensitive receptors along major transportation corridors serving the Project area.

The geographic scope for cumulative noise impacts includes the residential area in the Wilmington District north of C Street and the San Pedro residential neighborhoods west of the Harbor. This analysis assesses the potential of the proposed Project, along with other cumulative projects, to cause a substantial increase in noise as a result of project construction activities and operational activities (including on-site operations, increased traffic noise, and increased railroad noise). It was determined that no impact would occur under Cumulative Impact NOI-2, and therefore, no cumulatively considerable contribution to a cumulative impact would occur and no cumulative analysis is required.

### 5.2.9.2 Cumulative Impact NOI-1: Construction Noise – Cumulatively Considerable and Unavoidable

**Cumulative Impact NOI-1** represents the potential of construction activities of the proposed Project along with other cumulative projects to cause a substantial increase in ambient noise levels at sensitive receivers within the cumulative geographic scope.

A cumulative construction noise impact would be assessed if construction activities necessary to implement the proposed Project, in combination with one or more of the related and cumulative projects in the vicinity of the proposed Project area, would cause a substantial short-term increase in noise at a sensitive receptor, and the project contribution would be considered cumulatively considerable. A substantial increase is defined to be a 5-dBA increase during any daytime hour when construction activities would occur (refer to thresholds in Section 3.9.4.2, in Section 3.9, Noise). Thus, if overlapping noise levels from the concurrent construction of related projects exceeds 5 dBA at a sensitive receiver, a significant cumulative impact would result.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The list of related and cumulative projects was reviewed to determine if construction activities associated with any of these projects could, in combination with the proposed Project, cause a cumulative construction noise impact on sensitive receptors that would have a temporary increase in ambient noise levels during construction of the proposed Project (Fish Harbor and Reservation Point) .

In the vicinity of Reservation Point and Fish Harbor, projects that could occur concurrently with the proposed Project and would result in potential noise impacts on sensitive receptors include San Pedro Waterfront Project (#2), Evergreen Terminal (#5), Canners Steam Demolition (#6), Plains All American Oil Marine Terminal (#10), Westway Decommissioning (#12), Pan-Pacific Fisheries Cannery Buildings Demolition Project (#18), Southwest Marine Demolition Project (#25), APL Container Terminal (#31) City Dock Marine Research Center (#30), and Pier 500 Container Terminal Development (#32).

It is likely that construction activities and associated noise levels of related projects would be similar to those expected from the equipment necessary to construct the project elements. Additionally, several projects, including San Pedro Waterfront Project (#2), APL Container Terminal (#29), and Pier 500 Container Terminal Development (#32) include pile driving. It also is likely that the other related projects would result in cumulatively significant noise impacts at some sensitive locations due to concurrent construction.

#### Contribution of the Proposed Project

In the construction phase of the proposed Project, Al Larson Marina (Fish Harbor) and Reservation Point would experience a temporary increase in existing ambient noise levels from pile driving noise by 5 dBA or more, which is a significant impact. In addition, the proposed Project would have a greater than 1 dBA increase in ambient noise levels at San Pedro but would not exceed the City's noise impact thresholds. While construction of the proposed Project is not expected to cause significant noise impacts in the San Pedro neighborhoods, it is likely that there would cumulatively considerable noise impacts at locations where the proposed Project individually would not have significant adverse noise impacts.

Because construction activities would occur over a 3-year period (2011-2014) the probability that it would overlap, or be implemented concurrently with other related nearby projects is high (refer to Table 5-1). In particular, construction of the proposed Project and the adjacent APL Container Terminal (#29) would occur concurrently. Construction of projects within close proximity to the Project area would contribute to a significant cumulative construction noise impact to the sensitive receptors identified in Section 3.9, Noise, including Al Larson Marina (Fish Harbor) and Reservation Point, as well as locations of related projects. Therefore, the Project would make a cumulatively considerable contribution to a significant cumulative impact regarding noise impacts when combined with any other project that would affect these same receptor locations during the proposed Project's pile driving activities.

## Mitigation Measures and Residual Cumulative Impacts

Implementation of Mitigation Measures **MM NOI-1** (Noise Reduction during Pile Driving), **MM NOI-2** (Temporary Noise Barriers Adjacent to Pile Driving), and **MM NOI-3** (Temporary Noise Attenuation Barriers) would reduce the maximum noise levels during construction. Even with implementation of these mitigation measures, the proposed Project would make a cumulatively considerable contribution to a significant cumulative impact related to noise.

Considering the distances between the construction noise sources and receivers, the standard controls and temporary noise barriers may not be sufficient to reduce the projected increase in the ambient noise level to the point where it would no longer cause a cumulatively considerable impact. Consequently, construction of the proposed Project would contribute to a cumulatively considerable impact at closest sensitive receptors.

## Project Alternatives

### Alternative 1

Under Alternative 1, only water quality improvements would be constructed on site, thus the amount of construction would be substantially less as compared to the proposed Project and thus noise impacts would be greatly reduced. Given that only minor amounts of construction would occur onsite, the potential of Alternative 1 to contribute to a significant cumulative construction noise impact to the sensitive receptors including Al Larson Marina (Fish Harbor) and Reservation Point, is greatly reduced. However, should construction of Alternative 1 occur concurrently with construction of related nearby projects (in particular the APL Container Terminal [#29]), Alternative 1 would potentially make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact NOI-1. Mitigation measure **MM NOI-3** would reduce this contribution to less than cumulatively significant.

### Alternatives 2, 3, 6, and 7

Under Alternatives 2, 3, 6, and 7 construction activities would be similar or reduced from that of the proposed Project, in particular for Alternative 7 which would not include pile driving. Should construction of Alternatives 2, 3, and 7 occur concurrently with construction of related nearby projects (in particular the APL Container Terminal [#29]), Alternatives 2, 3, 6, and 7 would potentially make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact NOI-1. After mitigation, this impact would be reduced; however, it would remain a cumulatively considerable contribution to a significant cumulative impact.

#### Alternative 4

Under Alternative 4 construction noise at the Project site would be similar to that of the proposed Project, thereby resulting in a significant impact. The potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront, which could contribute to potentially significant noise impacts depending on the specific relocation site and the proximity to sensitive receptors and related projects undergoing construction concurrently. Therefore, Alternative 4 would make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact NOI-1. After mitigation, this impact would be reduced; however, it would remain a cumulatively considerable contribution to a significant cumulative impact.

#### Alternative 5

Under Alternative 5, construction noise at the Project site would be reduced to that of the proposed Project as no pile driving would occur. However, should construction occur concurrently with construction of related nearby projects (in particular the APL Container Terminal [#29]), Alternative 5 would potentially make a cumulatively considerable contribution to a significant cumulative impact. Further, construction would also occur at an alternative site, which could have noise impacts on the same sensitive receptors affected by noise occurring at the existing site. While no pile driving would not occur at the alternate site, should construction of an alternate site occur concurrently with construction of related nearby projects, Alternative 5 could make a cumulatively considerable contribution to a significant cumulative impact. After mitigation, this impact would be reduced; however, it would remain a cumulatively considerable contribution to a significant cumulative impact.

### 5.2.9.3 Cumulative Impact NOI-3: Creation of Operational Noise That Would Substantially Exceed Existing Ambient Noise Levels at Sensitive Receivers – Less than Cumulatively Considerable

**Cumulative Impact NOI-3** represents the potential of the proposed Project along with other cumulative projects to cause a substantial permanent increase in ambient noise levels at sensitive receptors within the geographic scope of the project.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Nearby operations associated with the Port Complex, such as the container terminals, are the dominant sources of community noise at noise sensitive receivers within the area of the proposed Project. Virtually all of the cumulative projects in Table 5-1, with the exception of, for instance, some of the Port-wide operational plans and programs, would contribute to existing noise sources such as traffic, terminal operations, and neighborhood noise sources, including parks and schools. Traffic noise would likely be the dominant noise source within most of the Port area; however, increases in traffic due to the related projects is not expected to double compared to existing traffic levels, which would be required for a 3 dBA increase in ambient noise levels. Therefore, the related projects would not result in a significant cumulative impacts related to noise.

#### Contribution of the Proposed Project

Based on the location of the Project site, noise from traffic is not the dominate source. Existing noise levels within the Project area are a result of a wide variety of sources

including, but mostly including ship engines, operation of bulk loading facilities and container terminal uses. Based on the nature of the proposed Project and the noise analysis, the proposed Project would not generate operational noise levels that exceed existing ambient noise levels at noise sensitive uses. Operational noise from the Project would increase noise levels at the adjacent noise sensitive uses (Al Larson Marina, Reservation Point, and San Pedro Community) by less than 3 dBA, and would not result in a significant impact at any adjacent noise sensitive uses. In addition, noise levels from Terminal Island would continue to be intermittently audible during quiet periods, but would also continue to be indistinguishable from existing sources of community noise at the Port and on the surrounding area. Therefore, increased noise from operations at the ALBS will not make a cumulatively considerable contribution to a significant cumulative impact regarding noise levels when combined with past, present, and reasonably foreseeable future projects.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1 and 6

Operations would remain the same under Alternative 1 and be eliminated under Alternative 6. Therefore, Alternatives 1 and 6 would have no impact and thus not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact NOI-3.

### Alternatives 2, 3, and 7

Operations would be similar or reduced as compared to the proposed Project under Alternatives 2, 3, and 7. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

### Alternative 4

Under Alternative 4 construction noise at the Project site would be similar to that of the proposed Project, thereby not contributing to a significant cumulative impact. The potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront. No new use is proposed for the buildings and thus no change in ambient noise levels would occur. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact NOI-3.

### Alternative 5

Under Alternative 5, the existing site would be vacated so no increase in ambient noise levels would occur. Noise levels at the alternate site would be similar to that of the proposed Project, and while one sites (i.e., the Main Channel (former Southwest Marine shipyard) is slightly closer to sensitive receptors at Reservation Point and in San Pedro, noise generated at the alternate site would be intermittent and largely indistinguishable from existing sources of community noise at the Port and on the surrounding area. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact.

# 5.2.10 Population and Housing

## 5.2.10.1 Scope of Analysis

The Initial Study (Appendix A) found that there would be no impacts for the proposed Project on population and housing *displacement;* therefore, that impact criterion is not addressed in Section 3.10, Population and Housing, or in this section. The scope of analysis in Section 3.10 and the associated cumulative analysis below is therefore limited to topics related to population and housing *growth*. The geographic region of analysis for cumulative effects on Population and Housing related to the proposed Project includes the Port of Los Angeles and the communities of San Pedro and Wilmington. For the purposes of this EIR, the timeframe of current or reasonably anticipated projects extends from 2008 to 2020, and the vicinity is defined as the area over which effects of the proposed Project could contribute to cumulative effects. The significance criteria used for the cumulative analysis are the same as those used for the proposed Project in Section 3.10.4.2.

## 5.2.10.2 Cumulative Impact POP-1: Substantial Population Growth in an Area, either Directly or Indirectly – Less than Cumulatively Considerable

**Cumulative Impact POP-1** represents the potential of the proposed Project when combined with past, present, and reasonably foreseeable future projects to result in development that would induce population growth, either directly or indirectly. Examples of a project inducing direct population growth would be one that developed new housing or removed an obstacle to growth by expanded existing infrastructure, such as roads or utilities, which would make it possible to develop housing in a previously unpopulated area. A project inducing indirect population growth would be one that fosters economic or population-expanding activities that would lead to further development, taxing existing facilities and eventually requiring construction of new facilities.

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Past projects within the Port and the San Pedro and Wilmington communities have induced population growth through the development of single- and multi-family dwelling units as well as through the creation of a large employment base, particularly dependent upon and related to operations at the Port. Although this growth has been accommodated through careful planning by local and regional authorities, environmental impacts have resulted.

Although there are no present or future housing development projects in the Port, nearly all of the proposed present and future Port projects listed in Table 5-1 would enhance the employment opportunities at the Port and possibly within the greater Los Angeles County region. Within the communities of San Pedro, Wilmington, Long Beach, and other adjacent communities, there are numerous commercial and industrial development projects that could contribute to employment growth in the area (i.e., Pacific Corridor Redevelopment Project (#39), Ponte Vista/Naval Site Project (#40), Distribution Center and Warehouse (#54), Wilmington Redevelopment Plan Expansion Project (#58),Charles Belak-Berger Project (#79),Shoreline Gateway Project (#108), Lyon West Gateway Residential Development Project (#126), Sepulveda Industrial Park (#68). In addition to the commercial development projects, there are several future housing development

projects within the San Pedro and Wilmington communities, including the Dana Strand Public Housing Redevelopment Project (#55), and other smaller residential developments (i.e., detached senior housing projects). However, these projects would add housing units to the area to support any increase in population or employment growth. These projects would not substantially displace the existing population or housing stock.

There are many present and future commercial and industrial projects planned for the Port and vicinity that could contribute to employment growth in the Los Angeles County and southern California region. The present and future residential projects planned for the area would provide additional housing to accommodate new employees that may come to community as a result of employment growth. Much of this employment and population growth would already be assumed in growth projections used for local and regional planning purposes (i.e., General Plans, air quality management plans, and regional transportation plans). Further it would occur within an existing urbanized area that has established infrastructure, well developed transportation network, and existing public services. Given that the area is part of a well-established urban community connected by an existing transportation network and large labor pool and housing market, the combined development projects would not significantly impact population growth in the Port area, or the region as a whole. Therefore, the cumulative impacts of past, present, and reasonably foreseeable future projects would be less than cumulatively significant.

## Contribution of the Proposed Project

As discussed in Section 3.10.4.3, the proposed Project would not directly or indirectly induce substantial population growth. It would not provide any new housing, nor would it directly induce development of new housing in the region by providing new infrastructure. Similarly, the amount of additional employment opportunities created by the proposed Project would be small when compared to the existing size of the regional economy, and therefore would not indirectly induce population growth through labor migration. The proposed Project would not directly or indirectly induce substantial population growth, and the cumulative impact of the proposed Project would be less than significant. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact POP-1 when combined with past, present, and reasonably foreseeable future projects.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would be less than cumulatively considerable. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternative 1

Under Alternative 1, construction would generate a lower number of jobs than the proposed Project, and operations would not expand so employment growth would not occur. Therefore, the contribution of Alternative 1 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact POP-1.

### Alternatives 2, 3, 4, and 7

Construction and operations under Alternatives 2 through 4, and 7 would generate a similar or smaller number of new jobs as compared to the proposed Project. Therefore, the contribution of Alternatives 2 through 4, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact POP-1.

### Alternative 5

Because construction would occur at two sites, a larger number of construction jobs may be generated. However, the population and housing impacts associated with this would be similar to that of the proposed Project. Operations would generate a similar number of new jobs as compared to the proposed Project under Alternative 5. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact POP-1.

### Alternative 6

Under Alternative 6, new construction jobs would be created similar to the proposed Project, however, the existing jobs would be eliminated with closure of the boat shop. Given the integrated nature of the regional economy, it is anticipated that the current employees would seek other employment. This loss of approximately 70 to 100 jobs would not change housing demand or migration patterns with the region. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact POP-1.

## 5.2.11 Public Services and Utilities

### 5.2.11.1 Scope of Analysis

Cumulative impacts on utilities and public services can result from the combined demand of the proposed Project along with past, present, and future related projects on any of the utilities and public services on which the proposed Project may have impacts (i.e., police and fire protection, water supply, landfill, and wastewater treatment capacities, energy, and recreational resources). The geographic scope depends on the service area of the individual public service or utility provider and the jurisdiction or service area over which increased demand for services from the proposed Project could reduce the availability of such services. For the Port Police, this area is localized to the Port Complex and neighboring Harbor Area communities, such as Wilmington. The service area of the LAPD and LAFD encompasses the City; however, the police and fire stations identified as serving the proposed Project serve only the Port and Harbor area. Direct impacts of the proposed Project would be localized to the Port area, and indirect impacts could extend further within the City. For stormwater, the geographic scope is the proposed Project site and immediately adjacent lands within the subwatershed of the Harbor because this represents the drainage area that would be influenced by the proposed Project. The service area of the Bureau of Sanitation (wastewater), Waste Management, Waste Connections, and Browning Ferris Industries (BFI) (solid waste), and LADWP (water and electricity) encompasses the City. The Southern California Gas Company (SCG) (natural gas) serves most of central and southern California. However, the analysis region for cumulative utilities impacts focuses on the Port and Harbor District because the infrastructure immediately serving the Project is located within this service area and service subareas of utility providers are sufficiently separated such that

increased service demands from the proposed Project would not threaten such provisions in other areas.

For the purposes of this EIR, the timeframe of current or reasonably anticipated projects extends from 2009 through to 2042, and the vicinity is defined as the area over which effects of the proposed Project could contribute to cumulative effects (the PMP area). The significance criteria used for the cumulative analysis are the same as those used for the proposed Project in Section 3.11, Public Services and Utilities.

### 5.2.11.2 Cumulative Impact PS-1: The proposed Project would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause cumulatively considerable environmental impacts– Less than Cumulatively Considerable

**Cumulative Impact PS-1** represents the potential of the proposed Project along with other cumulative projects to increase the demand for additional law enforcement officers and/or facility such that the USCG, LAPD or Port Police would not be able to maintain an adequate level of service without additional facilities.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The LAPD is not the primary police service provider in the Port area and primarily provides support to the Port Police under special circumstances (as described in Section 3.11.2.1.2); therefore, cumulative Port development would directly affect only the Port Police. Construction and operation of past projects has created an existing demand for police protection that is adequately accommodated by the Port Police and LAPD. The Port Police has continuously increased staffing levels in conjunction with past Port development in order to maintain adequate service levels. Many of the present and reasonably foreseeable related projects described in Table 5-1 involve the relocation of existing facilities within the Port and vicinity or do not otherwise involve expansion of facilities; therefore, these would not result in an increase in public resources. However, several of the related projects would utilize or increase the demand for local police services (Port Police) by increasing the amount of Port land used for operations. Specifically, the TraPac Terminal (#1), Evergreen Terminal (#5), Ultramar Lease Renewal Project (#11), China Shipping Terminal (#14), YTI Terminal (#23), Yang Ming Terminal (#24), APL Container Terminal (#29), Middle Harbor Terminal Redevelopment (#90), and Piers G & J Redevelopment (#91) would generate increased on-land terminal operations. However, similar to the proposed Project, these projects would be required to implement Maritime Transportation Security Act (MTSA)-mandated security features, including terminal security personnel, gated entrances, perimeter fencing, terminal and backlands lighting, and camera systems, that would reduce the demand for law enforcement personnel. Additionally, the Port Police would continue to increase staffing in conjunction with future development in order to ensure that adequate service would be provided to all future project sites.

The USCG determines response times based on the distance that is required to travel to the various Port facilities. Development due to the proposed Project and other reasonably

foreseeable related projects would not affect USCG response times because these projects would be located within the same operating distance of other facilities within the jurisdiction of Sector Los Angeles and Long Beach; therefore, response times would not increase.

Law enforcement services have developed over time in concert with surrounding development needs, and because of this, past, present, and reasonably foreseeable future related projects would not be cumulatively considerable and does not result in a significant cumulative impacts related to the demand for law enforcement.

## Contribution of the Proposed Project

As discussed in Section 3.11.4.3, the proposed Project would not substantially increase the demand for police protection services. Boat shop operations could result in a minimal increase in calls to the Port Police and/or LAPD, provisions for security features (including boat shop security personnel, gated entrances, perimeter fencing, boat shop and backlands lighting, camera systems, and additional security features mandated by the MTSA) would reduce the demand for law enforcement. In addition, the proposed Project would be located within the same operating distance as the existing ALBS and on-site facilities served by the USCG, and at no time would construction of the proposed Project significantly impact response or exiting times for USCG, LAPD, and Port Police. Accordingly, the proposed Project would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact PS-1 when combined with past, present, and reasonably foreseeable future projects.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would be less than cumulatively considerable. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1 and 6

Operations would remain the same as baseline under Alternative 1 and would cease under Alternative 6. Therefore, Alternatives 1 and 6 would have no impact and thus not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-1.

### Alternatives 2, 3, and 7

Operations would be similar or reduced as compared to the proposed Project under Alternatives 2, 3, and 7. Therefore, the contribution of Alternatives 2, 3, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-1.

### Alternative 4

Under Alternative 4, operations at the Project site would be the same as the proposed Project. The potentially historic buildings would be relocated to an area that is already served by Port Police and LAPD and no new uses would be established. Therefore,

impacts would be similar to the proposed Project and Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-1.

#### Alternative 5

Under Alternative 5, the existing site would be vacated and operations would be established at a new site that is currently served by the Port Police and LAPD. Therefore, impacts would be similar to the proposed Project and Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-1.

### 5.2.11.3 Cumulative Impact PS-2: The proposed Project would not cumulatively contribute to the need for a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service – Less than Cumulatively Considerable

**Cumulative Impact PS-2** represents the potential of the proposed Project along with other cumulative projects to require the addition of a new fire station, or the expansion, consolidation, or relocation of an existing facility, to maintain service.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Construction and operation of past projects has created an existing demand for fire protection that can be accommodated by the LAFD because emergency response times to the Port area are considered adequate. Many of the present and reasonably foreseeable future cumulative related projects described in Table 5-1 involve the relocation of existing facilities within the Port and vicinity or do not otherwise involve expansion of facilities; therefore, these would not result in an increased demand on fire protection. As described under Impact PS-2 in Section 3.11.4.3, LAFD emergency response times would only be affected by land use changes, removal of fire protection infrastructure, and removal of site access routes; intensification of existing uses would not affect response times. Several of the related projects would increase the demand for local fire protection services by increasing the amount of Port land used for operations. Specifically, the TraPac Terminal (#1), Evergreen Terminal (#5), Plains All American Oil Marine Terminal (#10), China Shipping Terminal (#14), YTI Terminal (#23), Yang Ming Terminal (#24), and APL Container Terminal (#29) would generate increased on-land terminal operations. However, these related projects would be designed and constructed to meet all applicable state and local codes and ordinances to ensure adequate fire protection, which would be subject to LAFD review and approval. These codes and ordinances would include measures such as requiring fire protection infrastructure (i.e., fire hydrants and sprinklers) and ensuring that the LAFD is given the opportunity to review and approve any changes in site access. Furthermore, fire stations in the area are generally distributed to facilitate quick emergency response throughout the proposed Project area. As a consequence, past, present, and reasonably foreseeable future related projects would not be cumulatively considerable and does not result in a significant cumulative impacts to fire protection services.

### Contribution of the Proposed Project

As discussed in Section 3.11.4.3, the proposed Project would not substantially increase the demand for fire protection services. The operation of the proposed Project would not result in an increase in average emergency response times, and the LAFD would be able to accommodate proposed Project related fire protection demands (USACE and LAHD, 2007). The proposed Project would be designed and constructed to meet all applicable state and local codes and ordinances to ensure adequate fire protection, which would be subject to LAFD review and approval. Consequently, the proposed Project would not increase the demand for fire services to a degree that would require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact PS-2 when combined with past, present, and reasonably foreseeable future projects.

### Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would be less than cumulatively considerable. The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

### Project Alternatives

#### Alternatives 1 and 6

Operations would remain the same as baseline under Alternative 1 and would cease under Alternative 6. Therefore, Alternatives 1 and 6 would have no impact and thus not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-2.

#### Alternatives 2, 3, and 7

Operations would be similar or reduced as compared to the proposed Project under Alternatives 2, 3, and 7, and all new construction would be subject to applicable state and local codes and ordinances to ensure adequate fire protection. Therefore, the contribution of Alternatives 2, 3, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-2.

#### Alternative 4

Under Alternative 4, impacts at the Project site related to fire protection services would be the same as the proposed Project. The potentially historic buildings would be relocated to an area that is already served by LAFD and no new uses would be established. Therefore, impacts would be similar to the proposed Project and Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-2.

#### Alternative 5

Under Alternative 5, the existing site would be vacated and operations would be established at a new site that is currently served by LAFD. As with the proposed Project, the alternate site would be designed and constructed to meet applicable state and local codes and ordinances to ensure adequate fire protection, which would be subject to LAFD review and approval. Therefore, impacts would be similar to the proposed Project

and Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-2.

### 5.2.11.4 Cumulative Impact PS-3: The proposed Project would not result in a cumulative increase in utility demands – Less than Cumulatively Considerable

**Cumulative Impact PS-3** represents the potential of the proposed Project along with other cumulative projects to create a substantial increase in utility demands that would result in the construction and/or expansion of water, wastewater, or storm drain lines in order to support new development.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The installation of utility lines that service the Port and its uses has occurred and accommodates the construction and operational demand for storm drain, water, and wastewater line infrastructure from past and present projects. Storm drains within the Port area are maintained by the LAHD and have sufficient capacity to accommodate current demands. The LADWP has installed numerous water lines to supply water throughout the Port, and these water lines have sufficient capacity. The LADWP Water Services Organization implements a Capital Improvement Program (CIP) (LADWP, 2010) on a 10-year planning basis that focuses on installing or replacing existing components of the water system to ensure the provision of a reliable and high-quality water supply to all the citizens of Los Angeles. The focus of the CIP is to develop a 10-year capital budget to program funds for capital improvements to the water system. The CIP is updated periodically to serve as a continuous planning and budgeting tool. Because LADWP will continue to update the CIP and provide water services for its customers, the past, present, and reasonably foreseeable future related projects would not be cumulatively considerable and does not result in a significant cumulative impacts on the water-distribution lines.

The TIWRP is currently operating at 58 percent of its capacity of 30 million gpd; therefore, it is able to adequately accommodate current wastewater generations that are a result of past projects. Wastewater in the TIWRP service area is conveyed to TIWRP through the conveyance system that is designed and sized to accommodate TIWRP capacity. Wastewater flows in the TIWRP service area are substantially below the plant's capacity and the capacity of the conveyance system. The City projects that by 2020, wastewater flows in the TIWRP service area will grow to 19.9 mgd (City of Los Angeles, 2006); therefore, approximately 10 mgd in daily capacity at TIWRP would remain unused and available for future years (beyond 2020). Wastewater from the related projects would not significantly affect existing or future capacity at TIWRP due to the substantial remaining capacity at TIWRP beyond 2020, which, based on the wastewater flow growth rate projected between 2006 and 2020, is estimated to adequately handle wastewater flow demands. Similarly, conveyance system capacity would accommodate wastewater flows from the related projects. Consequently, the past, present, and reasonably foreseeable future related projects would not be cumulatively considerable and does not result in a significant cumulative impacts to wastewater conveyance capacity.

Many of the related projects identified in Table 5-1 involve new or expanded land uses and/or increased cargo throughput that may result in additional demand on utilities and service systems. These related projects include the TraPac Terminal (#1), San Pedro

Waterfront Project (#2), Cabrillo Way Marina (#4), Evergreen Terminal (#5), Plains All American Oil Marine Terminal (#10), China Shipping Terminal (#14), Pasha Marine Terminal Improvements (#15), SCIG (#17), YTI Terminal (#23), Yang Ming Terminal (#24), and APL Container Terminal (#29). The related projects would likely require construction or installation of water, wastewater, and storm drains utility systems on their respective sites, and may have to connect with nearby supply utility lines (usually in streets and other public right-of-ways). Because the water, wastewater, and storm drain utility lines have adequate capacity and/or because service providers periodically evaluate the need to capital improvements and program projects when needed, past, present, and reasonably foreseeable future related projects would not be cumulatively considerable and does not result in a significant cumulative impacts to utilities.

## Contribution of the Proposed Project

As discussed in Section 3.11.4.3, the proposed Project would result in minimal increased water demands, wastewater generations, and storm runoff that would not exceed the capacity of existing facilities; however, construction and expansion of on-site water, wastewater, and storm drain lines would be required to support new terminal development. This new on-site infrastructure would tie into the existing utility lines that currently serve the Project site. All infrastructure improvements and connections that occur within City streets would comply with the LAMC, and would be performed under permit by the City Bureau of Engineering and/or LADWP. The proposed Project would be designed to accommodate increases in runoff rates without substantially affecting off-site storm drain systems. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact PS-3 when combined with past, present, and reasonably foreseeable future projects.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1 and 6

Demand for utilities would remain the same as baseline under Alternative 1 and be eliminated under Alternative 6. Therefore, Alternatives 1 and 6 would have no impact and thus not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-3.

### Alternatives 2, 3, and 7

Demand for utilities would be similar or reduced as compared to the proposed Project under Alternatives 2, 3, and 7. Therefore, the contribution of Alternatives 2 and 3, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-3.

### Alternative 4

Under Alternative 4, demand for utilities at the Project site would be the same as the proposed Project. The potentially historic buildings would be relocated to an area with existing utility infrastructure and no new uses would be established at the relocated buildings. Therefore, impacts would be similar to the proposed Project and Alternative 4

would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-3.

#### Alternative 5

Under Alternative 5, the existing site would be vacated and operations would be established at a new site which has existing utility infrastructure. Utility needs at the alternate site would be similar to the proposed Project and, thus, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-3.

### 5.2.11.5 Cumulative Impact PS-4: The proposed Project would not exceed water or wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities – Less than Cumulatively Considerable

**Cumulative Impact PS-4** represents the potential of the proposed Project along with other cumulative projects to generate substantial solid waste, water, and/or wastewater demands that would exceed the capacity of existing facilities.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Construction and operation of past projects has resulted in existing demands for water and generations of wastewater and solid waste. These demands and generations are currently accommodated by existing facilities. In order to properly plan for water supply, the LADWP determines water demands using factors such as demographics, weather, economy, and trends in development. The LADWP, in Chapter 6 of the UWMP, which is hereby incorporated by reference, determined an existing water demand within the DWP service area that can be accommodated by the planned water supply of the same amount (LADWP, 2005). The UWMP projects overall water supply reliability within the DWP service area through 2030; the LADWP forecast specifically includes anticipated demand from projects that are included in the Port's Community Plan or the PMP, including all past, present and reasonably foreseeable future Port related projects (LADWP, 2005). The LADWP expects it will be able meet the demand through 2030 with a combination of existing supplies, planned supplies, and MWD purchases (existing and planned). The California Urban Water Management Planning Act requires water suppliers to develop water management plans every 5 years. Because of this, the LADWP would continue to project future water demands and supply through new UWMPs every 5 years. Because the LADWP will continue to plan and provide water supply for its customers, the past, present, and reasonably foreseeable future related projects would not be cumulatively considerable and does not result in a significant cumulative impact on the provision of water.

The TIWRP has a capacity of 30 mgd and currently operates at 58 percent capacity. The City projects that by 2020, wastewater flows in the TIWRP service area will grow from the current 17.5 mgd to 19.9 mgd (City of Los Angeles, 2006); therefore, approximately 10 mgd in daily capacity at TIWRP would remain unused and available for future years. Wastewater from the related projects would not significantly affect existing or future capacity at TIWRP due to the substantial remaining capacity at TIWRP beyond 2020, which, based on the growth rate of the wastewater flow projected between 2006 and 2020, is estimated to adequately handle wastewater flow demands. Consequently, the past,

present, and reasonably foreseeable future related projects would not be cumulatively considerable and does not result in a significant cumulative impact to wastewater treatment capacity.

The three landfills that serve the City, including the Port area, are the Chiquita Canyon Landfill, the Sunshine Canyon Landfill, and the El Sobrante Landfill. As described in Section 3.11.2.2.4, the Chiquita Canyon Landfill has an allotted daily throughput capacity of 6,000 tons and is expected to operate until 2019. The Sunshine Canyon Landfill has a daily throughput capacity of 5,500 tons allotted for City use and is expected to accommodate demands until 2037 (CalRecycle, 2010). The City diverts approximately 600 tons per day to the El Sobrante Landfill, which has a maximum daily permitted capacity of 16,054 tons per day, and its projected closure date is 2045 (CalRecycle, 2010). Approximately 4,000 tons per day of capacity is reserved for refuse generated in Riverside County (City of Lake Elsinore, 2006).

The 2009 County Integrated Waste Management Plan Annual Report indicates that the landfills currently serving the county as whole do not have adequate capacity to accommodate the solid waste needs over the next 15 year planning period (2010 through 2014) unless additional steps are taken (County of Los Angeles, 2011). However, with actions that are currently being pursued by the county and local jurisdictions, including the City, the county could accommodate the demand through the planning period. Such actions include the development of alternative technologies, expanding existing landfill facilities (including Chiquita Canyon), increasing recycling and waste diversion, and facilitating transfers to out of county landfills, including establishment of a waste-by-rail program to transport waste from Los Angeles to Mesquite Landfill in Imperial County.

According to the Bureau of Sanitation's 2009-2010 Year at a Glance Report, the City achieved a recycling/diversion rate of 65 percent (City of Los Angeles, Department of Public Works, Bureau of Sanitation, 2010). In 2008, the diversion rate of the Port was approximately 85 percent, or 19,987 tons (Port of Los Angeles, 2010). Currently, the city has a goal of achieving a diversion rate of 75 percent by 2013, 90 percent by 2025, and an ultimate goal of zero waste by 2030 citywide. (City's website: www.zerowaste.lacity.org). To meet these goals, the City is developing alternative technologies such as Conversion Technologies that involve converting post-recycled residual solid waste into useful products, including fuels, chemicals, marketable products, and other sources of clean energy; combustion technologies; or waste-to-energy facilities.

With the remaining capacity of Sunshine Canyon City/County Landfill, along with the anticipated recycle diversion rates for the area, and planned county and city actions to meet anticipated demand, solid waste removal and disposal would be adequately provided for past, current, and future projects, and impacts would not be cumulatively considerable and does not result in a significant cumulative impact.

Many of the related projects identified in Table 5-1 involve new or expanded land uses and/or cargo throughput that may result in additional utility demands. These related projects include the TraPac Terminal (#1), San Pedro Waterfront Project (#2), Cabrillo Way Marina (#4), Evergreen Terminal (#5), Plains All American Oil Marine Terminal (#10), China Shipping Terminal (#14), Pasha Marine Terminal Improvements (#15), SCIG (#17), YTI Terminal (#23), Yang Ming Terminal (#24), and APL Container Terminal (#29). The number of related projects would increase the demands for water as well as generation of wastewater and solid waste. Based on the above, the past, present, and reasonably foreseeable future related projects would not be cumulatively considerable and does not result in a significant cumulative impacts on the provision of

water, would not be cumulatively considerable and does not result in a significant cumulative impact on wastewater treatment capacity, or solid waste capacity.

## Contribution of the Proposed Project

As discussed in Section 3.11.4.3, the proposed Project would result in minimal increased water demands, and wastewater and solid waste generations that would not exceed the capacity of existing facilities. Based on the water demand factors provided (Section 3.11.2.2.1), operation of the proposed Project would operate at full capacity in 2014 and would generate a maximum water demand of approximately 6.57 afy, which represents 0.0009 percent of the anticipated LADWP water demand (705,000 acre-feet). The proposed Project is expected to operate at full capacity after the construction of Phase 3 is completed in 2014 and is expected to continue until the lease on the property ends in 2042. The UWMP estimates that LADWP demand in 2030 will be 776,000 acre-feet, for which LADWP forecasts sufficient water supplies (LADWP, 2005). The UWMP is required to be updated every 5 years, thus future water demand and supply planning for the City, including the Port or Los Angeles, would occur at regular intervals.

Based on the wastewater generation factor of 24 gallons per capita per day (gpcd), construction and operation of the proposed Project would result in 0.006 mgd of wastewater, which represents 0.004 percent of the existing flow of 17.5 mgd and 0.0002 percent of the TIWRP capacity of 30 mgd. The City projects that by 2020, wastewater flows in the TIWRP service area will grow from the current 17.5 mgd (about 58 percent of TIWRP capacity) to 19.9 mgd; therefore, approximately 10 mgd in daily capacity at TIWRP would remain unused and available for future years (beyond 2020). The amount of wastewater generated by the Project would not significantly affect existing or future capacity at TIWRP considering the limited construction and operational flows and the substantial remaining capacity at the plant beyond 2020. As described above, at projected growth rates of wastewater flow, TIWRP will have adequate capacity to serve Project flows. The minor increase in wastewater flow generated by the proposed Project would not exceed the capacity of the sewer trunk lines in the proposed Project area. In addition, the City periodically performs an evaluation of its wastewater conveyance and treatment system, for long-term planning and capital improvement purposes to ensure adequate service.

Construction and demolition activities could generate debris that would require disposal in a landfill. Construction debris is one of the greatest individual contributors to solid waste capacity, making up approximately 22 percent of the State of California's waste disposal demand (CIWMB, 2004b). Proposed construction activities would generate some construction and demolition materials including asphalt, concrete, building materials, and solids. Due to lower disposal costs or tipping fees, asphalt and concrete are typically recycled for aggregate base or disposed of at inert landfills instead of sanitary landfills. In addition, approximately 19,000 cy of dredged material would be generated during dredging of the Fish Harbor at Berth 258. The dredged material would be reused for the creation of the CDFs and would not affect landfill capacity and would therefore not affect solid waste disposal facilities.

Project operations would result in a negligible increase in the generation of solid waste. Based on the solid waste generation factor of 10.53 pounds of waste per employee per day for commercial uses (City of Los Angeles, 2006), the proposed Project would generate approximately 192.2 tons of solid waste per year (0.0.005 tons per day) that would require transportation to Chiquita Canyon Landfill, Sunshine Canyon Landfill, or other disposal facility (refer to Table 3.11-5). This amount represents 0.00008 percent of

the permitted daily capacity of 5,000 tons at Chiquita Canyon Landfill, 0.00008 percent of the permitted daily capacity of 5,500 at the Sunshine Canyon Landfill, or 0.00007 percent of the available permitted daily capacity at the El Sobrante Landfill. The landfills would be able to accommodate the negligible increase in solid waste generated by Project operations through their respective closure dates, estimated to be approximately 2030. Solid waste generated from Project operations after closure of the Chiquita Canyon Landfill, the Sunshine Canyon Landfill, and the El Sobrante Landfill (2030 and after) would represent a significant impact to landfill capacity. However, if additional adequate landfill capacity is permitted and made available, if more distant landfill capacity is utilized for solid waste generated in the City, and/or if the achievement of Zero-Waste solutions in the City occurs over an extended time period, then the solid waste generated by the Project likely would not represent a significant impact to landfill capacity.

Although construction wastes would be generated, construction debris is generally reused or recycled where economically feasible. Although hazardous materials could be encountered and require disposal during construction activities, several contaminated soil treatment and disposal options and Class I landfills are available for off-site disposal. Because of this, impacts related to exceeding the capacity of a Class I landfill would be less than significant. Consequently, significant impacts to hazardous materials landfill capacity would not occur. Because adequate landfill capacity would be available through the Project horizon year of 2042, the proposed Project not result in a cumulatively considerable contribution to a significant cumulative impact to landfill capacity. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact PS-4 when combined with past, present, and reasonably foreseeable future projects.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternative 1

Water demand and wastewater and solid waste generation would remain the same as baseline under Alternative 1. Therefore, Alternative 1 would have no impact and thus not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-4.

### Alternatives 2, 3, and 7

Water demand and wastewater and solid waste generation would be similar or reduced as compared to the proposed Project under Alternatives 2, 3, and 7. Therefore, the contribution of Alternatives 2, 3, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-4.

### Alternative 4

Under Alternative 4, demand for utilities at the Project site would be the same as the proposed Project. The potentially historic buildings would be relocated to an area with existing utility supply infrastructure and no new uses would be established. Therefore, impacts would be similar to the proposed Project and Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-4.

### Alternative 5

Under Alternative 5, the existing site would be vacated and operations would be established at a new site. A larger amount of solid waste would be generated during construction activities associated with clearing the existing site and alternate site, and disposal of contaminated soils and sediments. Sufficient capacity is available in landfills that accept construction waste and hazardous waste. Water demand and wastewater and solid waste generation associated with operations would be similar to that of the proposed Project. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-4.

### Alternative 6

Under Alternative 6, the existing site would be vacated and operations would cease site. A larger amount of solid waste would be generated during construction activities associated with clearing the existing site and disposal of contaminated soils and sediments as compared to the proposed Project. Sufficient capacity is available in landfills that accept construction waste and hazardous waste. Water demand and wastewater and solid waste generation associated with operations would be eliminated. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-4.

## 5.2.11.6 Cumulative Impact PS-5: The proposed Project would not contribute to cumulative impacts on energy demands, supply facilities, and distribution infrastructure – Less than Cumulatively Considerable

**Cumulative Impact PS-5** represents the potential of the proposed Project along with other cumulative projects to generate increases in energy demands such that the construction of new energy supply facilities and distribution infrastructure would be required.

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Construction and operation of past and present projects has resulted in existing demands for water and generations of wastewater and solid waste. These demands and generations are currently accommodated by existing facilities as provided by the LADWP and SCG. Many of the related projects identified in Table 5-1 involve new or expanded land uses and/or cargo throughput that may result in additional demand on electricity and natural gas. These related projects include the TraPac Container Terminal (#1), San Pedro Waterfront Project (#2), Cabrillo Way Marina (#4), Evergreen Container Terminal Improvements (#5), Plains All American Oil Marine Terminal (#10), China Shipping (#14), China Shipping (#14), Pasha Marine Terminal Improvements (#15), SCIG (#17), YTI Terminal (#23), Yang Ming Container Terminal (#24), and APL Container Terminal (#29). These related projects would place an additional demand on electricity and natural gas.

Under the Los Angeles City Charter (Sections 220 and 673), LADWP has the power and duty to construct, operate, maintain, extend, manage, and control water and electric works and property for the benefit of the City and its habitats. As a consequence, LADWP is charged with maintaining sufficient capability to provide its customers with a reliable supply of power. LADWP is required to meet operational, planning reserve and

reliability criteria standards of the Western Electricity Coordinating Council (WECC) and the North American Electric Reliability Corporation (NERC). The LADWP prepared an Integrated Resources Plan (IRP) in 2000, 2006, and most recently in 2010 to provide a framework to assure that future energy needs of LADWP customers are reliably met at competitive rates while exercising environmental stewardship (LADWP, 2010). In 2002, SB 1078 implemented a Renewable Portfolio Standard, which established a goal that 20 percent of the energy sold to customers be generated by renewable resources by 2017. The IRP provides objectives and recommendations to reliably supply LADWP customers with power and to meet the 20 percent renewable energy goal by 2010 and work towards meeting the recently enacted state Renewable Energy Standard of 33 percent by 2020.

As of the 2010 IRP, LADWP prepared a Load Forecast that predicted that LADWP customers' electricity consumption will increase at an average rate of 1.3 percent per year (100 megawatts per year) over the next 20 years with less growth over the next few years due to the current economic recession. For 2027, LADWP predicts that peak demand will reach 7,445 megawatts.

Through implementation of strategies identified in the IRP, electricity resources and reserves at LADWP will adequately provide electricity for the Port, including past, present, and reasonably foreseeable future projects. LADWP is required by the Charter to provide a reliable supply of electricity for its customers and because LADWP is moving toward increasing renewable energy supplies in its resource portfolio, the electricity demand of the past, present, and reasonably foreseeable future projects would not result in the need to construct a new unplanned off-site power station or facility. In addition, the LAHD has an agreement with the State Attorney General's office to provided 10 MW of solar within the Port that would assist in providing energy. As a result, past, present, and reasonably foreseeable future related projects would not be cumulatively considerable and does not result in a significant cumulative impact related to the provision of energy.

## Contribution of the Proposed Project

As discussed in Section 3.11.4.3, the proposed Project would result in minimal increased demands for electricity and natural gas. Electricity demands at the proposed Project site would be related to boat shop operations, site and security lighting, and general site maintenance. However, the increase in electricity demands associated with the boat shop operations would not exceed existing supplies and/or result in the need for major new facilities. The proposed Project would provide new energy distribution infrastructure on-site required to support proposed Project operations. The proposed Project would incorporate all applicable energy conservation measures in compliance with California's Building Code CCR Title 24 that requires building energy-efficient standards for new construction (including requirements for new buildings, additions, alterations, and, in nonresidential buildings, repairs). Incorporation of these design standards, as required by state law, would reduce wasteful energy consumption. In addition to energy-efficient designs that are mandated by current building codes, on-site structures would be sited and constructed to maximize natural heating and cooling. All light fixtures used at the Project site would meet the latest efficiency standards and would not waste input energy by producing unusable light in the form of glare. As a result, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact PS-5 when combined with past, present, and reasonably foreseeable future projects.

### Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

### Project Alternatives

#### Alternatives 1 and 6

Energy demand would remain the same as baseline under Alternative 1 and be eliminated under Alternative 6. Therefore, Alternatives 1 and 6 would have no impact and thus not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-5.

#### Alternatives 2, 3, and 7

Energy demand would be similar or reduced as compared to the proposed Project under Alternatives 2, 3, and 7. Therefore, the contribution of Alternatives 2, 3, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-5.

#### Alternative 4

Under Alternative 4, energy demand at the Project site would be the same as the proposed Project. The potentially historic buildings would be relocated to an area with existing energy supply infrastructure and no new uses would be established at the relocated buildings so any new demand would be minimal (i.e., electricity needed for security lighting). Therefore, impacts would be similar to the proposed Project and Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-5.

#### Alternative 5

Under Alternative 5, the existing site would be vacated and operations would be established at a new site which has existing utility infrastructure. Energy demand at the alternate site would be similar to the proposed Project and, thus, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact PS-5.

## 5.2.12 Traffic and Transportation

### 5.2.12.1 Scope of Analysis

The transportation environmental setting for the cumulative ground transportation analysis includes those streets and intersections that would be used by both automobile and truck traffic to gain access to and from the Al Larson site, as well as those streets that would be used by construction traffic (i.e., equipment and commuting workers). The transportation analysis includes freeway/roadway segments and intersections (7 intersections) that would be used by truck and automobile traffic to gain access to and from the proposed Project site. The segments and key intersections are presented in Section 3.12, Traffic and Transportation. These roadways and intersections would also be used by construction traffic.

The analysis of roadway impacts presented in Section 3.12 reflects cumulative conditions; that is, future 2013 buildout conditions projected with the proposed Project in place

including traffic from other regional development that is expected to occur whether the proposed Project is implemented or not. It was determined that no impact would occur under Impact TRANS-4, and therefore, no cumulatively considerable contribution to a cumulative impact would occur and no cumulative analysis is required.

### 5.2.12.2 Cumulative Impact TRANS-1: The proposed Project would not result in a short-term, temporary cumulative increase in construction-related truck and auto traffic that could result in decreases in roadway capacity, potential safety hazards, and disruption of travel for vehicular and nonmotorized travelers – Less than Cumulatively Considerable

**Cumulative Impact TRANS-1** represents the potential of the proposed Project along with other cumulative projects to result in a short-term, temporary increase in construction truck and auto traffic, transport of construction equipment and materials to and from the construction site.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Construction activities could result in temporary increases in traffic volumes and roadway disruptions in the vicinity of a construction site. Potential cumulative construction effects from past, present, and reasonably foreseeable future projects on roadway operations include the following:

- Temporary increases in traffic associated with construction worker commutes, delivery of construction materials, hauling of demolished and/or excavated materials, and general deliveries would increase travel demand on roadways.
- Temporary roadway lane closures or narrowings in areas directly abutting construction activities would reduce capacity of roadways.
- Temporary roadway closures associated with the construction of transportation infrastructure would reduce the capacity of the roadway system and/or require detours that increase travel times.
- Temporary lane or road closures could require route detours or reduced service for transit routes that run adjacent to construction activities.
- Temporary sidewalk, lane, or road closures could occur adjacent to project elements that are under construction, which could interfere with bicycle or pedestrian circulation.
- Heavy and slow-moving construction vehicles would mix with general-purpose vehicular and non-motorized traffic in the area.

The impact of cumulative construction-generated traffic on transportation operations and safety would be cumulatively significant should it occur concurrently and in the same vicinity.

#### Contribution of the Proposed Project

There would be increased travel on the study area roadway system during construction of the proposed Project associated with construction worker's vehicles and trucks delivering equipment to and removing material from the site.

As a standard practice, the Port requires contractors to prepare a detailed traffic management plan for Port projects that result in improvements to streets, which includes the following: detour plans, coordination with emergency services and transit providers, coordination with adjacent property owners and tenants, advanced notification of temporary bus stop loss and/or bus line relocation, identify temporary alternative bus routes, advanced notice of temporary parking loss, identify temporary parking replacement or alternative adjacent parking within a reasonable walking distance, us of designated haul routes, use of truck staging areas, observance of hours of operation restrictions and appropriate signing for construction activities. The traffic management plan would be submitted to LAHD for approval before beginning construction.

The proposed Project would be constructed between 2012 and 2013. Of the present and reasonably foreseeable future projects listed in Table 5-1, the other projects on Terminal Island for which it is reasonably foreseeable that construction would occur in the same time period are the Plains All American Oil Marine Terminal (#10), YTI Container Terminal, and APL Container Terminal (#29). These projects, as well as other Port of Los Angeles projects, would be subject to the same requirements as the proposed Project for development of a traffic management plan subject to LAHD approval.

Given that impacts of the proposed Project are less than significant, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1, 2, 3, 6, and 7

Under Alternatives 1 through 3, 6, and 7, the amount of construction would be similar or less than the proposed Project. Therefore, the number of construction-related vehicle trips would be similar or less than the proposed Project. Therefore, Alternatives 1 through 3, 6, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact TRANS-1.

### Alternative 4

Under Alternative 4 construction traffic traveling to and from the Project site would be similar to that of the proposed Project. The potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront, which would result in a temporary traffic increase, including truck traffic moving sections of the building. As with the proposed Project, a detailed traffic management plan would be prepared to address the building relocation and other construction activities, and other Port of Los Angeles projects would be subject to the same requirements. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact TRANS-1.

### Alternative 5

Under Alternative 5, construction traffic traveling to and from the Project site would be slightly greater than that of the proposed Project, as a result of increased demolition and increased export of soils and sediments, however it is anticipated that this temporary

traffic increase would generally occur outside of peak hours and would result in less than significant impacts. Additionally construction traffic would travel to and from the alternate location, which would include relocation of the potentially historic buildings. As with the proposed Project, detailed traffic management plan would be prepared to construction traffic, and other Port of Los Angeles projects would be subject to the same requirements. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact TRANS-1.

### 5.2.12.3 Cumulative Impact TRANS-2: Operation of the proposed Project would not result in a long-term increase in truck and auto traffic that would result in a significant cumulative impact on transportation/circulation – Less than Cumulatively Considerable

**Cumulative Impact TRANS-2** represents the potential for the proposed Project along with other cumulative projects to significantly impact volume/capacity ratios, or level of service, at intersections within the cumulative transportation area of analysis.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Increases in traffic volumes on the surrounding roadways due to cumulative new development would in turn degrade intersection operations. As described in greater detail in Section 3.12.4.1, the background future traffic growth forecast is developed based on SCAG Regional Growth Model and the Port's Travel Demand Model. All Ports of Long Beach and Los Angeles projected container and non-container terminal traffic growth are included in the Port Travel Demand Model.

The related projects would result in increased traffic on the transportation system in the Project vicinity, which could result in certain intersections operating at unacceptable levels of service. As a result, the related projects could result in a significant cumulative impact.

#### Contribution of the Proposed Project

The proposed Project would increase traffic volumes and reduce LOS at intersections within the proposed Project vicinity. There would be increased travel on the study area roadway system during operation of the proposed Project associated with workers vehicles to and from the site. Table 3.12-6 shows the anticipated intersection Levels of Service during operation of the proposed Project with the peak number of additional workers on the roadway system. As shown on the table, no significant impacts would occur. As a result, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact TRANS-2 when combined with past, present, and reasonably foreseeable future projects.

#### Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

### Project Alternatives

#### Alternatives 1 and 6

Operations would remain the same under Alternative 1 and be eliminated under Alternative 6. Therefore, Alternatives 1 and 6 would have no impact and thus not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact TRANS-2.

#### Alternatives 2, 3, and 7

Operations would be similar or reduced as compared to the proposed Project under Alternatives 2, 3, and 7. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact TRANS-2.

#### Alternative 4

Under Alternative 4, operations would be the same as that of the proposed Project. The potentially historic buildings would be relocated to the San Pedro or Wilmington Waterfront. However, mo new use is proposed for the buildings and thus no additional vehicle trips would be generated. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact TRANS-2.

#### Alternative 5

Under Alternative 5, operations would be the same as that of the proposed Project however at an alternate location. This traffic impacts associated with the alternate location are anticipated to be similar to that of the proposed Project. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact.

## 5.2.12.4 Cumulative Impact TRANS-3: Operation of the proposed Project would not result in a significant cumulative increase in related public transit use beyond the supply of such services anticipated at Project build-out – Less than Cumulatively Considerable

**Cumulative Impact TRANS-3** represents the potential of the proposed Project along with other cumulative projects to result in a significant increase in related public transit use.

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The past projects have contributed to the current transit baseline, and the present and future projects would result in additional transit demand due to employees, the increase in work-related trips, and increases in school and shopping related transit trips. Cumulatively, the projects combined could result in an increase in demand for transit; however, this is not expected to exceed transit supply and thus would not be cumulatively considerable and does not result in a significant cumulative impact. Section 3.12.2.3 describes the existing local and regional transit services (METRO, DASH, Long Beach Transit, etc.) in the proposed Project area. These providers continually monitor

cumulative transit demand and enhance or adjust services to meet demand, based on available funding.

### Contribution of the Proposed Project

As described in Section 3.12, Traffic and Transportation, the proposed Project would create additional on-site employees; however, the increase in work-related trips using public transit would be negligible. Port terminals generate low transit demand for several reasons. The primary reason that proposed Project workers generally would not use public transit is their work shift schedule. Most workers prefer to use a personal automobile to facilitate timely commuting. Also, Port worker's incomes are generally higher than similarly skilled jobs in other areas and higher incomes correlates to lower transit usage.

In addition, parking at the Port is readily available and free for employees, which encourages workers to drive to work. Finally, though there are 134 existing transit routes that serve the general area surrounding the proposed Project, none of the existing routes stop within one mile of the proposed Project site. There are no other cumulative projects that are expected to generate increased demand for transit services along the same transit routes serving the proposed Project. Consequently, the impact of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact.

### Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

### Project Alternatives

#### Alternatives 1 and 6

Under Alternatives 1 and 6, no employment growth would occur thus, public transit demand would not increase. Therefore, Alternatives 1 and 6 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact TRANS-3.

#### Alternatives 2, 3, 4, 5, and 7

A similar or smaller number of new jobs would be created under Alternatives 2 through 5, and 7 as compared to the proposed Project. Therefore, the contribution of Alternatives 2 through 5, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact TRANS-3.

## 5.2.13 Water Quality, Sediments, and Oceanography

### 5.2.13.1 Scope of Analysis

The geographic scope of analysis for cumulative impacts to water and sediment quality is the Los Angeles and Long Beach Harbor (Fish Harbor, Inner Harbor, and Outer Harbor areas), as these areas represent the receiving waters for all cumulative projects considered. The geographic scope for surface water hydrology and flooding is the proposed Project and immediately adjacent lands within the Harbors subwatershed, because this represents the drainage area that would be influenced by the proposed Project and other cumulative projects. The significance criteria used for the cumulative analysis are the same as those

used for the proposed Project in Section 3.13.4 in Section 3.13, Water Quality, Sediments and Oceanography.

### 5.2.13.2 Cumulative Impact WQ-1: The proposed Project would contribute cumulatively discharges that create pollution, contamination, nuisance (as defined in Section 13050 of the CWC), or causing regulatory standards to be violated in Harbor waters – Cumulatively Considerable and Unavoidable

**Cumulative Impact WQ-1** represents the potential of the proposed Project, along with other related projects, to create pollution, cause nuisances, or violate regulatory standards for water quality.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Water and sediment quality within the geographic scope are affected by activities within the Harbor (i.e., shipping, wastewater discharges from the TIWRP, inputs from the watershed including aerial deposition of particulate pollutants, and effects from historical (legacy) inputs to the Harbor). As discussed in Section 3.13, portions of the Los Angeles and Long Beach Harbor are identified on the current Section 303(d) list as impaired for a variety of chemical and bacteriological stressors and effects to biological communities. For those stressors causing water quality impairments, a revised TMDL problem statement for the assessment for toxic pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors has been released (RWQCB and USEPA, 2010). The draft TMDL was finalized in 2010. The RWQCB amended the Basin Plan (Resolution No. 2004-011) to incorporate a TMDL for bacteria at Los Angeles Harbor, including Inner Cabrillo Beach and the Main Channel (effective 2005). TMDLs will be developed that will specify load allocations from the individual input sources, such that the cumulative loadings to the Harbor would be below levels expected to adversely affect water quality and beneficial uses of the water body. However, these TMDL studies are not planned until the year 2019 (see Section 3.13.2.1). Thus, in the absence of restricted load allocations, the impairments would be expected to persist, resulting in a cumulatively significant impact to water quality.

Past, present, and reasonably foreseeable future related projects with in-water construction components, such as dredging, dike placement, fill, pile driving, and pier upgrades, would result in temporary and localized effects to water quality that would be individually comparable to those associated with proposed Project. Water quality impacts associated within-water construction projects would not persist for the same reasons discussed in Section 3.13. Therefore, cumulative impacts would occur only if the spatial influences of concurrent projects overlapped. Of the cumulative related projects listed in Table 5-1, only the San Pedro Waterfront (#2), Channel Deepening Project (#3), Plains All American Oil Marine Terminal (#10), Berth 226-236 (Evergreen) Container Terminal Improvements Project (#5), , and APL Container Terminal (#29) are located in the vicinity of the proposed Project and involve in-water construction activities. Dredging for the Channel Deepening Project (#3) has been completed. A number of projects within the Port of Long Beach, including the Middle Harbor Terminal Redevelopment (#90) and Piers G and J Redevelopment (#91), would involve dredging and/or in-water construction. However, as described in Section 3.13, water quality impacts from dredging would be limited, and therefore, the water quality effects of these

projects would be limited to the immediate dredging or construction area. As a result, in-water and over-water construction of the present and reasonably foreseeable future projects w would not be cumulatively considerable and does not result in a significant cumulative impact related to water quality.

Wastewater discharges associated with project operations and runoff from project sites would be regulated by NPDES or stormwater permits. The permits would specify constituent limits and/or mass emission rates that are intended to protect water quality and beneficial uses of receiving waters. In addition, related projects in the Port Complex would be operated in accordance with industrial SWPPPs that require monitoring and compliance with permit conditions. SUSMP requirements would also be implemented via the planning, design, and building permit processes. Although standard regulatory compliance measures would apply to the related projects, which would minimize their pollutant contributions to the Harbor, the Harbor is still listed on the Section 303(d) list as being impaired, and would likely remain so until TMDLs can be fully implemented throughout the entire watershed. Consequently, the related projects would be cumulatively considerable and result in a cumulatively significant impact to water quality related to its Section 303(d) listing.

Development of port facilities associated with the cumulative related projects, including Berth 136-147 TraPac Marine Terminal (#1), Evergreen Container Terminal (#5), Plains All American Oil Marine Terminal (#10), China Shipping Development Project (#14), YTI Container Terminal (#23), Yang Ming Container Terminal (#24), Middle Harbor Terminal Redevelopment (#90), APL Container Terminal (#29) and Piers G & J Terminal (#91), are expected to contribute to a greater number of ship visits to the Port Complex. Assuming that the potential for accidental spills, illegal vessel discharges, and leaching of contaminants from vessel hulls would increase in proportion to the increased vessel traffic, waste loadings to the Harbor would also be expected to increase. The significance of this increased loading would depend on the volumes and composition of the releases, as well as the timing and effectiveness of spill response actions. However, because Harbor waters are considered impaired and because these related projects would contribute to pollutant loadings through accidental spills and illegal discharges, or pollutant leaching from vessel hull coatings, these related projects would result in a cumulatively significant water quality impact.

## Contribution of the Proposed Project

As discussed in Section 3.13.4.3, in-water construction of the proposed Project has the potential to result in spills directly to Harbor waters. While these project-level spills during construction would be subject to SPCC regulations (that would contain and neutralize the spill) and spill responses by the dredging contractors (deploy floating booms to contain and absorb the spill and use pumps to assist the cleanup) that would prevent the accidental spill from causing a nuisance or from adversely affecting beneficial uses of the Harbor, accidental spills during construction would nonetheless would make a cumulatively considerable contribution to a significant cumulative impact regarding water quality if spills from other in-water construction projects also occur.

Fish Harbor has been listed by the SWRCB on the *Final 2010 Integrated Report: Clean Water Act Sections 303(d)* list for impaired water bodies. For those Los Angeles Harbor waters listed on the 303(d) list, the CWA requires the establishment of TMDLs. A revised TMDL problem statement for the assessment for toxic pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors has been released (RWQCB and USEPA, 2010). Within this document, the water quality is assessed, the problem

statement is defined, and numeric targets are proposed; however, the sediment loading capacity has not yet been determined. The TMDL resolution for toxic pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors was passed by the Los Angeles RWQCB on May 5, 2011, and awaiting review and approval by the State Board, the State Office of Administrative Law, and pursuant to CWA Section 303(d) and Section 303(c) as appropriate, by the USEPA. Finalization is expected by March 2012. TMDLs are under active development for the above water bodies. In the absence of restricted load allocations, the impairments would be expected to persist. Therefore, the proposed Project would make a cumulatively considerable contribution to a cumulatively significant impact related to TMDLs.

Accidental spills of petroleum hydrocarbons, hazardous materials, and other pollutants from proposed Project-related upland operations are expected to be limited to small volume releases because large quantities of those substances are unlikely to be used, transported, or stored on the site. In addition, the facility operator has a Spill Prevention Plan that ensures that the facility include containment and other countermeasures that would prevent oil spills that could reach navigable waters. Because of this, upland operations of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact related to spills.

Currently, ALBS facility services approximately 60 percent of its vessels from within the Port Complex. The remaining 40 percent come from outside the Port Complex, with the furthest north being vessels from Seattle, Washington, and as far south as Mexico. Although the proposed Project would increase the number of ship calls, operation of the Project is expected to draw the same percentage of vessels locally and regionally. It is assumed that a portion of the 40 percent of vessels from outside the area are specifically traveling to the Project site and would not otherwise be already at the Port. In addition, larger vessels could be serviced than is currently possible. Therefore, increased operation under the proposed Project could contribute to a comparatively higher number of spills compared to baseline conditions. Although spill events would be addressed according to procedures described in the Spill Prevention Plan, for oceangoing vessels that carry substantial amounts of fuel, an accidental spill could conceivably be large in the event of a catastrophic accident, which, although remote, could result in significant contamination entering the Harbor. As a result, the proposed Project's increased vessel operations (particularly from vessels outside the Port Complex that would not otherwise be at the Port but are at the Project site for service) would make a cumulatively considerable contribution, although minor, to a significant cumulative impact related to accidental spills from vessels.

The proposed Project is unlikely to result in illegal vessel discharges or a significant level of pollutants leaching from vessel hull coatings. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact WQ-1 when combined with past, present, and reasonably foreseeable future projects.

## Mitigation Measures and Residual Cumulative Impacts

The proposed Project would have less than cumulatively considerable impacts on water quality as a result of runoff; therefore, no mitigation measures would be required. However, control measures comprised of some key regulatory requirements would be implemented and complied with as part of the proposed Project.

As discussed above, if an accidental spill were to occur during in-water/over-water construction and operations of the proposed Project it would make a cumulatively considerable contribution to a significant cumulative impact. Regardless of the implementation of spill prevention procedures, if a catastrophic accident occurs, it could result in significant contamination of Harbor or ocean waters. No mitigation measures are available for accidental spills related to other in-water/over-water construction projects, besides project-level regulatory compliance and standard practices that would have additive effects and thus would make a cumulatively considerable contribution to a significant cumulative impact.

## Project Alternatives

### Alternative 1

Under Alternative 1, construction would be minor consisting only of water quality improvements. No increase in operations would occur, and thus the potential for a spill to occur during operations would not increase. However, in the unlikely event of an accidental spill associated with construction activities, a significant contamination of Harbor or ocean waters could result. Therefore, Alternative 1 could make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact WQ-1.

### Alternatives 2, 3, 4, and 7

Under Alternatives 2 through 4, and 7, construction and operation would be similar or less than the proposed Project and therefore impacts would be similar. Therefore, Alternatives 2 through 4, and 7 would have less than cumulatively considerable impacts on water quality as a result of runoff, but would make a cumulatively considerable contribution to a significant cumulative impact should an accidental spills occur. Therefore, Alternatives 2 through 4, and 7 could make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact WQ-1.

### Alternative 5

Under Alternative 5, the Project site would be vacated and all structures and paving would be removed. Contaminated soils would be replaced with clean fill and contaminated sediment would be removed and hauled off site. All applicable BMPs and other standard soil management procedures would be implemented to minimize erosion from the vacated site. BMPs would also be implemented at the alternate site to minimize erosion similar to the proposed Project. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact WQ-1.

### Alternative 6

Under Alternative 6, the Project site would be vacated and operations would cease. In the unlikely event of an accidental spill associated with construction activities, a significant contamination of Harbor or ocean waters could result. Therefore, Alternative 6 could make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact WQ-1.

### 5.2.13.3 Cumulative Impact WQ-2: The proposed Project would not contribute cumulatively to increased flooding that would have the potential to harm people or damage property or sensitive biological resources – Less than Cumulatively Considerable

**Cumulative Impact WQ-2** addresses the potential of the proposed Project along with other cumulative projects to cause flooding sufficient to harm people or damage property or sensitive biological resources.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The proposed Project is outside the 100-year flood zone. The majority of Pier 300, to the east of the Project site, across Fish Harbor, is mapped by the Federal Emergency Management Agency (FEMA) as Flood Zone X (defined as areas of 0.2 percent annual chance flood; areas of one percent annual chance flood with average depths of less than one foot or with drainage areas less than one square mile; and, areas protected by levees from one percent annual chance flood). A portion of the Pier 300 in the vicinity of Earle and Bass Streets is mapped as Flood Zone AE (defined as special flood hazard areas that are subject to inundation by the one percent annual chance flood). However, waters of the Harbor near land, plus some of the landfill margins in other areas of the Harbor, are mapped within the 100-year flood zone.

Past development has increased the amount of impervious surface area within the watershed, and has also included installation of a storm drain system to collect and convey stormwater runoff. This system has mitigated the impacts of past development with respect to flooding potential. Cumulative related projects would affect the flooding potential (relative to the baseline) only if the increased runoff volumes or altered drainage patterns exceeded the capacity of the storm drainage system to convey runoff of excess water volumes off-site. Cumulative projects near the proposed Project with the potential to affect drainage patterns and runoff volumes include the following related projects: San Pedro Waterfront (#2), Channel Deepening Project (#3), Plains All American Oil Marine Terminal (#10), Berth 226-236 (Evergreen) Container Terminal Improvements Project (#5), Canners Steam Demolition (#6), Pan-Pacific Fisheries Cannery Buildings Demolition Project (#18), Southwest Marine Demolition Project (#25), and APL Container Terminal (#29). Similar to the proposed Project, these cumulative related projects are located on flat terrain, such that minor grading and paving associated with project construction would not substantially alter runoff patterns, velocities, or volumes sufficiently to increase risks of local flooding or harm to people, property, or biological resources. Consequently, the past, present, and reasonably foreseeable future projects would not result in a cumulatively significant flooding impact.

#### Contribution of the Proposed Project

As discussed in Section 3.13.4.3, the proposed Project site is designated by FEMA as Flood Zone X. However, the proposed Project site is not in a 100-year flood zone and would not result in increased flooding. Implementation of the proposed Project (construction and operational activities) would not increase the potential for flooding on-site because on-site storm drains would be installed, BMPs would be employed to provide significant treatment of the pollutants prior to discharge, site elevations and the flat site topography would remain generally the same, and because the site is located

adjacent to Harbor waters. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact WQ-2 when combined with past, present, and reasonably foreseeable future projects.

## Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would be less than cumulatively considerable and would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternative 1

Under Alternative 1, construction would be minor consisting only of water quality improvements. This would improve the management of on-site drainage and, as with the proposed Project, would not result in increased flooding. Therefore, Alternative 1 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact WQ-2.

### Alternatives 2, 3, and 7

Under Alternatives 2, 3, and 7, construction and operation would be similar or reduced as compared to the proposed Project and therefore impacts would be similar. Therefore, Alternatives 2, 3, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact WQ-2.

### Alternative 4

Under Alternative 4, construction and operation at the Project site would be similar as compared to the proposed Project and therefore impacts would be similar. Relocation of the potentially historic buildings would not be expected to result in increase flooding risk. Therefore, Alternative 4 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact WQ-2.

### Alternative 5

Under Alternative 5, the Project site would be vacated and all structures and paving would be removed. Contaminated soils would be replaced with clean fill to maintain the existing elevation and thus, no increased flooding risk would result. Impacts associated with construction and operation at the alternate site would be similar to the proposed Project. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact WQ-2.

### Alternative 6

Under Alternative 6, the Project site would be vacated and operations would cease. Contaminated soils would be replaced with clean fill to maintain the existing elevation and thus, no increased flooding risk would result. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact WQ-2.

### 5.2.13.4 Cumulative Impact WQ-3: The proposed Project would not contribute cumulatively to a permanent adverse change in movement of surface water in the Harbor– Less than Cumulatively Considerable

Cumulative Impact WQ-3 addresses the potential of the proposed Project along with other cumulative projects to permanently alter surface water movements and cause adverse changes in water or sediment quality.

#### Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The proposed Project site is within a commercial harbor environment that has been highly modified by past dredging, filling, and shoreline development in support of the maritime operations. Past, present, and reasonably foreseeable future related projects such as TraPac Marine Terminal (#1), Cabrillo Way Marina (#4), Evergreen Container Terminal (#5), China Shipping Development Project (#14), YTI Container Terminal (#23), and Yang Ming Container Terminal (#24), APL Container Terminal (#29), would add fill to the Harbor once completed. Although the construction of fill areas either has or will reduce the overall amount of surface water within the Harbor, they would not substantively affect the movement of surface water in the Harbor.

Past dredging, filling, and shoreline development operations have altered surface water movement in the Harbor through alterations to landforms and bathymetry. For example, water circulation patterns have been altered by the past, present, and future cumulative projects that include dredging and/or placement of fill (i.e., TraPac Marine Terminal (#1), Cabrillo Way Marina (#4), the Channel Deepening Project (#3), Evergreen Container Terminal (#5), Plains All American Oil Marine Terminal (#10), China Shipping Development Project (#14), YTI Container Terminal (#23), San Pedro Waterfront (#2), Yang Ming Container Terminal (#24), APL Container Terminal (#29), and Middle Harbor Terminal Redevelopment (#90). Baseline studies and other routine monitoring efforts, discussed in Section 3.13, have not reported hypoxic (low oxygen concentrations) conditions or other anomalous spatial patterns in water quality indicators that would reflect stagnation or limited water exchange between areas within the Harbor complex. This is reasonable because fill would not be placed for any project in an area that disrupts vessel navigation. The channels and waterways that are maintained for vessel navigation provide for adequate water exchanges between different areas of the Harbor complex that are adequate to avoid stagnation. Once construction of the aforementioned facilities is completed, project operations would not cause a permanent adverse change to the movement of surface water because these projects would not install barriers to prevent or impede water movement in and out of Fish Harbor.

Circulation patterns are established and maintained by tidal currents. Flood tides in the Harbor flow into the Harbor and up the channels, while ebb tides flow down the channels and out of the Harbor. Fill related to other projects would not adversely affect tidal movement in the Harbor. As a consequence, the related projects would not result in a cumulatively significant impact related to surface water movement or tidal currents in the Harbor.

#### Contribution of the Proposed Project

As discussed in Section 3.13.4.3, dredging activity, as well as the installation of the new finger piers and piles and fill areas, for the proposed Project would alter the existing

bathymetry. Construction and operation of the proposed Project would not result in a permanent adverse change in surface water movement because these activities would not impose barriers to water movement into and out of the waters of Fish Harbor. Therefore, the contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact WQ-3 when combined with past, present, and reasonably foreseeable future projects.

#### Mitigation Measures and Residual Cumulative Impacts

The contribution of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

#### Project Alternatives

##### Alternatives 1 and 7

Under Alternatives 1 and 7 no in-water construction would occur that could result in permanent adverse change in surface water movement. Therefore, Alternatives 1 and 7 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact WQ-3.

##### Alternatives 2, 3, and 4

Under Alternatives 2 through 4, construction and operation would be similar or reduced as compared to the proposed Project and therefore impacts would be similar. Therefore, Alternatives 2 through 4 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact WQ-3.

##### Alternative 5

Under Alternative 5, the Project site would be vacated and all structures, including piers and wharves would be removed, and contaminated sediments would be dredged. As with the proposed Project, this would alter the existing bathymetry, however, these activities would not impose barriers to water movement into and out of the waters of Fish Harbor. Similarly, in-water construction occurring at an alternate location could affect existing bathymetry, however, it would not result in barriers to movement of surface water. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact WQ-3.

##### Alternative 6

Under Alternative 6, the Project site would be vacated and all structures, including piers and wharves would be removed, and contaminated sediments would be dredged. As with the proposed Project, this would alter the existing bathymetry, however, these activities would not impose barriers to water movement into and out of the waters of Fish Harbor. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact relative to Cumulative Impact WQ-3.

### 5.2.13.5 Cumulative Impact WQ-4: Cumulative Acceleration of Rates of Erosion and Sedimentation – Less than Cumulatively Considerable

**Cumulative Impact WQ-4** represents the potential for the proposed Project along with other cumulative projects to increase the rates of soil erosion within onshore portions of the Project site and within the site or in adjacent properties and receiving waters.

## Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Although past projects have disturbed soils within upland areas of the watershed that drain to the Harbor, the erosive effects of these disturbances have passed. Cumulative past, present, and future related projects with construction operations similar to those of the proposed Project would disturb soils within upland areas of the watershed that drain to the Harbor. Cumulative related projects such as TraPac Marine Terminal (#1), San Pedro Waterfront Project (#2), Cabrillo Way Marina (#4), Evergreen Container Terminal (#5), Plains All American Oil Marine Terminal (#10), China Shipping Development Project (#14), YTI Container Terminal (#23), Yang Ming Container Terminal (#24), and APL Container Terminal (#29), have or are expected to disturb soils and make them temporarily (during construction) subject to erosion by wind or runoff, and increase the potential for transport to and accumulation in waterways. Other cumulative related projects with a dredging component, such as Channel Deepening Project (#3), have removed watershed-derived sediments that accumulated with navigational channels and new project areas. Soils exposed by construction activities would be subject to erosion, transport off-site, and deposition in the Harbor. However, construction SWPPPs would incorporate BMPs to minimize erosion and off-site transport of soils and solids from construction and project sites. In addition, the related projects would result in additional impervious coverings over much of their respective sites, which would limit site erosion and sedimentation. Because of this, the related projects would not result in a cumulatively significant impact related to erosion or sedimentation.

## Contribution of the Proposed Project

As discussed in Section 3.13.4.3, the baseline potential for erosion of soils in the proposed Project site is low due to the flat terrain, infrequent rainfall events, and moderate wind velocities. In addition, the proposed Project would operate on a slightly larger area than baseline conditions, the Project site would be completely paved, which would prevent erosion from occurring during shipyard operations. Construction and operation of the proposed Project would not accelerate natural processes of wind and water erosion because all applicable BMPs and other standard soil management procedures would be implemented to minimize erosion from the Project site. Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact WQ-4 when combined with past, present, and reasonably foreseeable future projects.

## Mitigation Measures and Residual Cumulative Impacts

The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, no mitigation measures would be required.

## Project Alternatives

### Alternatives 1, 2, 3, 4, and 7

Under Alternatives 1 through 4, and 7, construction and operation would not accelerate natural processes of wind and water erosion because all applicable BMPs and other standard soil management procedures would be implemented to minimize erosion from the Project site, and the Project site would be complete paved. Therefore, as with the proposed Project, Alternatives 1 through 4, and 7 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact WQ-4

### Alternative 5

Under Alternative 5, the Project site would be vacated and all structures and paving would be removed. Contaminated soils would be replaced with clean fill. All applicable BMPs and other standard soil management procedures would be implemented to minimize erosion from the vacated site. BMPs would also be implemented at the alternate site to minimize erosion similar to the proposed Project. Therefore, Alternative 5 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact WQ-4.

### Alternative 6

Under Alternative 6, the Project site would be vacated and all structures and paving would be removed. Contaminated soils would be replaced with clean fill. All applicable BMPs and other standard soil management procedures would be implemented to minimize erosion from the vacated site. Therefore, Alternative 6 would not make a cumulatively considerable contribution to a significant cumulative impact under Cumulative Impact WQ-4.