Chapter 5 Boat Launch Analysis

5.1 Introduction

5.1.1 Boat Launch Study Overview

As part of the proposed project, and at the request of the community, the LAHD considered the feasibility of nine possible alternative locations for the establishment of a public boat launch facility within the Port. The objective of providing such a facility is to expand the capacity of public boat launching opportunities within the Port beyond the existing facility at Cabrillo Beach. The establishment of a boat launch facility is a separate element of the larger Cabrillo Way Marina project, and is addressed as a "standalone" project component in this chapter.

Upon review of the boat launch alternatives analysis, the boat launch facility and the Cabrillo Way Marina project would be considered by the Los Angeles Board of Harbor Commissioners. To allow the Board flexibility in evaluating and approving a boat launch facility, this SEIR provides a general operational and environmental feasibility analysis of each of the nine alternative boat launch facilities under consideration. None of the nine alternative locations has undergone detailed physical site planning study; therefore, the boat launch components at the alternative sites are evaluated at a conceptual level in this SEIR. The level of detail of the analysis will correspond with the level of detail that is available regarding the alternative sites and their opportunities and constraints.

5.1.2 Boat Launch Site Alternatives

The boat launch site alternatives are illustrated in Figure 5-1. Table 5-1 provides rankings for each site based on permitted land use policies and compatibility, infrastructure availability, site layout/size, and other feasibility criteria. The following is a qualitative summary of the alternative boat launch sites and their general suitability for boat launch operations.

■ Alternative Site A (Berth 56) is currently vacant and is located on the north side of the East Channel within Planning Area 2/West Bank. The site

formerly served as a dry storage facility for Cabrillo Beach Yacht Club, in which boats were launched by crane into the harbor. The site is accessible by the freeway and could accommodate good signage. The site layout would be somewhat constrained to allow for proper circulation, queuing, and parking availability. The ability to establish waterside infrastructure is moderate, but the site is close to open water and available infrastructure, and would experience few vessel conflicts.

- Alternative Site B (Southern Pacific [SP] Slip) is currently occupied by a fishing boat fleet, located within the SP Slip near Ports O' Call within the Planning Area 2/West Bank. The site is readily accessible to the freeway and could accommodate good signage. The site layout would be somewhat constrained to allow for proper circulation, queuing, and parking availability. Part of the commercial fishing fleet would need to be relocated. Some local vessel conflicts could exist in the Slip. The ability to establish waterside infrastructure is moderate, but the site is close to open water and available infrastructure.
- Alternative Site C (Berth 95 Area) is located beneath the Vincent Thomas Bridge and currently has an existing ramp that was formerly used by seaplanes. The site is located adjacent to the Catalina Terminal and is near the S.S. *Lane Victory* and Los Angles World Cruise Terminal. While the site would be accessible to the freeway and could accommodate good signage, the site layout would be somewhat constrained to allow for proper circulation, queuing, and parking availability. The existing ramp would be beneficial in providing waterside and landside infrastructure, but there are potential security concerns regarding the proximity to the cruise terminal and bridge. This site is relatively close to open water and available infrastructure, but is located adjacent to the Main Channel of the Port. This site also could experience moderate vessel conflicts with the existing Catalina and Cruise Terminals, and the *Lane Victory*.
- Alternative Site D (Berth 161 Area) is the current location of the Wilmington Marine lease within the Wilmington District Planning Area 5 of the Port. The site is located in proximity to the Port's construction and maintenance yard and an existing petroleum product storage area. The site has relatively poor accessibility from the freeway, and the site has moderate potential to accommodate an adequate layout for circulation, queuing, and parking. The ability to establish waterside and landside infrastructure and utilities is moderately high, but the site is some distance to open water (outside of breakwater) and could experience potential vessel conflicts.
- Alternative Site E (Berth 183–184 area) is located near Banning's Landing, which is within the Wilmington District Planning Area of the Port, and is currently occupied by the College of Oceaneering. The site is located in proximity to an existing petroleum product storage area (Wilmington Liquid Bulk [VOPAK]). The site has relatively poor accessibility from the freeway, and is subject to extensive truck and rail traffic encumbrances. The site has low to moderate potential to accommodate an adequate layout for circulation, queuing, and parking. The ability to establish waterside and landside infrastructure and utilities is moderately high, but the site is some distance to open water and could experience potential vessel conflicts.

Table 5-1. Conceptual Alternative Launch Ramp Sites Matrix

Location	Planning Area	Land Use	Zoning	Site Acreage	Parking Area	Site Access	Site Layout	Waterside Infra- structure/ Site Conditions ^(h)	Navigability ⁽ⁱ⁾		Compatibility with Adjacent Uses	Lease/Re- location Issues for Current Tenant	Other Con- straints	Comment
Ideal loca- tion/guidelines:					20 vehicle/trailer spaces per launch lane 40 ft by 9–10 ft spaces	way ac-	Easy circulation, room for queuing, 50 launches/day per 15 ft lane	Ramp: 15% slope; boarding float: one per 2.5- 3 lanes	Harbor	Ready availability of power/ light- ing/water/sewer			Gradual slope	
A Berth 56 (north side of East Channel)	West Bank	General Cargo ^(a) Recreation	2 [Q]M2	Approx. 1 acre (inc. CDFG; more acreage po- tentially available north of 22 nd or at Berth 55)	2	5	2	3	5 (close, little ship traffic)	4	2		Elevation concerns	Formerly dry stor- age for CBYC (launch by crane).
B SP Slip	West Bank		2 [Q]M2	Approx. 2.5 acres on south side of slip	2 (limited by adja- cent uses)	5	2	3 (Could have ramp parallel to shoreline; est. 2–3 lanes)	5	4 or 5	2	Fishing boat fleet	Possible historic re- source; ele- vation con- cerns	Parking/Circulation issues with prox- imity to Ports O' Call.
C Berth 95 Area (expand/rebuild existing ramp)		Commercial ^(g) General Cargo	3 [Q] M3	Variable, depending on allocation of shared park- ing area	Current layout: 3 (assumes recon- figuration of exist- ing parking lot) W/O Catalina: 4 (would make available approx. 2 acres)		4	5	5	4 or 5	4	Catalina Ter- minal holds lease	Security concerns; Port plan- ning con- cerns	Site would be adja- cent to the Catalina Terminal. Proximity to Lane Victory and Cruise Terminal.
D Berth 161 Area (Wilmington Marine)	Wilmington District	Institutional ^(b) (Near Liquid Bulk ^(c))	5B [Q]M3	Approx. 2.5 acres	3	2	3	3 or 4	3	4 or 5	3	Wilmington Marine Lease; water area used for es- sential Port C&M activi- ties	Elevation concerns	Very close to petro- leum product stor- age.
E Berth 183 (near Banning's Land- ing)		General Cargo (Near Liquid Bulk)	5A [Q] M3	Approx. 0.7 acres water- side and 2.0 acres north of Water Street	3	2	3	3 or 4 (room to construct 2-lane ramp at angle to shoreline)	2	4 or 5	3	College of Oceaneering	Elevation concerns	Parking area can be improved with adja- cent property.

Location	Planning Area	Land Use	Zoning	Site Acreage	Parking Area	Site Access	Ratings Site Layout	Waterside Infra- structure/ Site Conditions ^(h)	Navigability ⁽ⁱ⁾	Utilities ^{(j)0}		Lease/Re- location Issues for Current Tenant	Other Con- straints	Comment
F Berths 200 G- (Consolidated Slip)	U	Commer- cial ^(g) /Recreatio nal	5A [Q] M3	Approx. 3.5 acres available	3 or 4	2	3	2 or 3	1	3 or 4	4		Remedia- tion of C. Slip may involve dike/fill	Near Leeward Bay Marina.
G Berth 200Z A (near dredge mat. offload area)	rea Cerritos Chan- nel		6 [Q]M2	Approx. 2–2.5 acres avail- able (if dredge offload site included)		1	2	2 or 3	1	2	3	Dredge off- load/vacant	Elevation concerns	Parking may be provided in dredge storage area. Open undeveloped and not infrastructure (sew- age, water, electric- ity, and parking).
H Berth 204 Col Boatworks (E pand exist. ramp)		Recreational Marina ^(k)	6 [Q]M2	Variable, depending on allocation of shared park- ing area	2	2	2	3	2	3	4	Colonial: Long term lease		Circulation issues a with Peninsula Road and Anchorage Road. The site has a one-lane ramp, which would be expanded with its parking facilities.
I Berth 193-194 Area (POLA C&M debris collection yard	District	Liquid Bulk ^(c) (near institu- tional ^(b))	5A [Q] M3	Approx. 4 acres available	4 or 5	3	4 or 5	4	3	3	4	POLA C&M use would be relocated		
 Below average Average cond Above average Above average Well-suited to Notes: a) General Carge b) Institutional to c) Liquid Bulk if d) Industrial usee e) Other Liquid f) Recreational g) Commercial to h) Including bul i) Including ves j) Existing/pote 	o includes containe ises pertain to thos s comprised of cru s include shipbuild is comprised of me uses include water uses include restau khead, depth, ramp sel traffic conflicts ntial including boa	ed, although with of loped for suggeste evelop/implement ers, breakbulk, neo e lands that either de oil, petroleum p ling/yard repair fa- olasses, animal oil oriented parks, m rants, and tourist a o construction limit and access to ope t wash, restrooms,	lifficulty. d use. use. obulk, unit, an owned or leas products, petro cilities, light r s, and fats, an arinas and rela- ttractions (i.e tations, protect n water. gate booth, a	ated facilities, small craft lau . Port O' Call, office facilitie ction (wind/wave), and silt p	mical and allied p vities and ocean re unching ramps, mu s, and retail activi otential.	roducts. esource oriente iseums, youth ities.)	camping and wa	ter-oriented facilities,	public beaches, pu	blic fishing piers, and	sportfishing.			

- Alternative Site F (Berth 200 G-H) is located near Leeward Bay Marina and is currently occupied by commercial/recreational uses within the Wilmington District Planning Area of the Port. The site has relatively poor accessibility from the freeway, and has low to moderate potential to accommodate an adequate layout for circulation, queuing, and parking. The ability to establish waterside and landside infrastructure and utilities is relatively low and the site is quite far from open water, thereby resulting in potential vessel conflicts.
- Alternative Site G (Berth 200Z Area) is currently mostly vacant and is located near the dredge material offload area within the Cerritos Channel Planning Area of the Port. The site has poor accessibility from the freeway, and has rather low potential to accommodate an adequate layout for circulation, queuing, and parking (however, parking may potentially be provided in the dredge storage area). The ability to establish waterside and landside infrastructure is relatively low, and the site currently has no utility infrastructure available. Additionally, this site is quite far from open water, thereby resulting in high potential for vessel conflicts.
- Alternative Site H (Berth 204 Colonial Boat Works) is currently occupied by Colonial Boat Works and is located within the existing East Basin Marina in the Cerritos Channel Planning Area of the Port. The site has poor accessibility from the freeway and has rather low potential to accommodate an adequate layout for circulation, queuing, and parking. The ability to establish waterside and landside infrastructure is relatively low. Additionally, this site is quite far from open water, thereby resulting in high potential for vessel conflicts.
- Alternative Site I (Berth 193-194 Area) is located adjacent to Yacht Street and across from an existing petroleum product storage area (Wilmington Liquid Bulk [VOPAK]). The site has relatively poor accessibility from the freeway, but would not be subject to extensive truck and rail traffic encumbrances. The site has moderate potential to accommodate an adequate layout for circulation, queuing, and parking. The ability to establish waterside and landside infrastructure and utilities is moderately high, but the site is some distance to open water and could experience potential vessel conflicts.

5.1.3 Boat Launch Description

Boat Launch Facilities

LAHD has identified nine potential boat launch sites located throughout the Port and near the communities of Wilmington and San Pedro. Although each site requires differing site-specific design considerations, the following basic elements would comprise the new boat launch at any location:

■ a launch attendant/fee station;

- a multi-lane launch ramp (typically 2–4 lanes at 12–15% slope), with adequate turning radius to permit the maneuvering of boats and trailers at the top of the ramp; ramp footprint would typically require approximately 0.3–0.5 acre of fill to construct;
- a boarding float/dock;
- a boat wash rack (typically a 30-foot wide by 50-foot long concrete pad and hose bib);
- a restroom facility (typically 200–500 square feet); and
- a parking lot designed consistent with the California Department of Boating and Waterways, including stalls 10–12 feet wide by 40–50 feet long and minimum 25-foot drive aisles.

For impact discussion and calculation purposes in this chapter, it is generally assumed that the daily boater turnover rate would generate up to 120 launches and retrievals per weekend day at a launch facility with 40 parking spaces. This is likely an overestimation of daily turnover since most recreational boaters spend at least a half-day on the water. That assumption is particularly applicable to those potential launch sites that require a longer transit to Outer Harbor.

Alternative Launch Technologies

Two basic alternatives exist for public boat launch operations: the common launch ramp and the less common crane operation. Although the potential boat launch sites were primarily evaluated as boat ramp sites, the following discussion provides a basis for consideration of other launch technology.

Launch Ramp

The standard launch ramp is comprised of a parking area, apron, and the launch ramp built into the slope at the edge of the water. The launch ramp is usually at a 12–15% slope into the water to facilitate the launching and retrieval of boats directly from their travel trailers. The trailers are backed down the slope and into the water until the boat is floated off the trailer bed. For retrieval the operation is reverse. Courtesy floats are typically provided to secure the boat while parking or retrieving the tow vehicle.

The launch ramp facility must include an area for maneuvering boats and trailers at the top of the ramp, and a parking area for the tow vehicles and trailers. Typical launch areas also include restrooms, boat wash areas, security lighting, and fish cleaning stations.

Crane Launch

Alternatively, cranes may be used to launch and retrieve boats. Typical installations are jib boom cranes that are mounted on a bulkhead wall. Special rigging is used to lift the boat from its trailer, or cradle, and to move the boat over and into the water. A second crane or hoist system uses slings around the bottom of the boat to lift the boat off its trailer and move it over and into the water.

Crane launch operations are more complex than standard launch ramps. The crane operations require special rigging and equipment and must be specially made for each vessel. Some boat trailers cannot accommodate these sling hoist systems of launching.

Similarly to the launch ramp, the crane launch facility must also include an area for maneuvering the boats and trailers at the crane, and a parking area for the tow vehicle and trailers. Boarding floats must also be provided to accommodate a crane launch system.

5.2 Environmental Analysis

In the event that the Board selects an alternative boat launch site for further consideration, and if environmental impacts are not fully disclosed at this level of analysis, this SEIR would serve as the first tier in CEQA compliance for an alternative boat launch site. A first-tier EIR may contain generalized mitigation criteria and policy-level alternatives, thereby allowing the Port to focus on the issues that are suitable for decision-making and exclude from consideration those issues that are already decided or are not yet ready for decision-making. The CEQA documents at subsequent tiers contain the focused analysis for site-specific mitigation requirements and a specific set of alternatives.

Because all potential launch sites are located within a comparable environment and are surrounded by similar types of land uses, many of the environmental characteristics of the potential launch sites are very similar. Therefore, to eliminate redundancy, an effort has been made to consolidate or cross-reference information that is applicable to all of the potential boat launch sites. The same regulatory settings described in Chapters 3.1 to 3.14 apply to all launch sites. Most impact discussions apply to a generic launch facility at all of the potential sites. However, where applicable, any information specific to a potential launch site is included under a section heading identifying that site.

5.2.1 Land Use

Setting Applicable to All Potential Launch Sites

General site conditions at each of the alternative launch sites are summarized in the following sections. The alternative boat launch site land uses, zoning designations, and land use compatibility rankings are provided in Table 5-1.

Impacts and Potential Mitigation

All Potential Sites

The alternative boat launch site land uses, zoning designations, and land use compatibility rankings are provided in Table 5-1.

A launch site would generally be compatible with surrounding land uses and would be located within areas that consist of industrial and commercial uses. At most potential sites, launch ramp users would not actively recreate within the vicinity. Therefore, because boaters would vacate the premises immediately after entering the water, no impacts associated with incompatible surrounding land uses would occur.

At any of the analyzed sites, a launch ramp would not disrupt, divide, or isolate existing neighborhoods, communities, or land uses in the surrounding areas. No site is immediately adjacent to established housing communities, and a launch operation would generally be located within commercial and industrialized areas. Therefore, impacts would be less than significant.

5.2.2 Transportation/Circulation

Setting

Alternative Site A (Berth 56)

The following roadways serve Alternative Site A and the immediate vicinity:

22nd Street: 22nd Street is a four-lane east-west roadway and is located adjacent to the site. Parking is not allowed along the portion of 22nd Street adjacent to the project. A fenced and gated concrete parking lot is located between 22nd Street and the water within the East Channel. The lot is presently used for parking tractor-trailers and the vehicles of employees of adjacent businesses.

Harbor Boulevard/Miner Street: Harbor Boulevard is the primary arterial route in the vicinity of Berth 56, transitioning to Miner Street south of Crescent Avenue. It is a 4-lane north-south arterial that would serve as a major travel

route between the site, the communities of San Pedro and Wilmington, and the regional freeway network to the north.

Miner Street: Miner Street is a 4-lane north-south street that provides a direct link between Berth 56 and the San Pedro Communities. The intersection of 22nd Street and Miner Street is signalized. South of this intersection, Miner Street becomes a 2-lane roadway that is in poor condition, and that terminates near Berths 47 and 46.

Access to the site from the surrounding communities of San Pedro and Wilmington would be provided via Harbor Boulevard with direct access from 22^{nd} Street. The surrounding area that is immediately available for parking would not provide sufficient space for launch ramp users. This area consists of an existing paved lot approximately 0.60 acres in size.

Alternative Site B (Southern Pacific [SP] Boat Slip)

The following roadways serve Alternative Site B and the immediate vicinity:

Harbor Boulevard: Harbor Boulevard is the primary arterial route in the vicinity of the SP Slip. It is a 4-lane north-south arterial that serves as a major travel route between the SP Slip, the regional freeway network to the north, and the surrounding communities of San Pedro and Wilmington. On-street parking is allowed adjacent to the site and in other selected areas. Left turn and right turn lanes are provided at intersections. Major intersections are signalized; however, the intersection with Timms Way, which would provide direct access to the site, is not signalized.

Timms Way: Timms Way is a 2-lane local roadway that provides access from Harbor Boulevard to commercial fishing vessels within the SP Slip and other adjacent commercial and industrial uses. The Timms Way intersection with Harbor Boulevard is not signalized and dead ends near Berth 74.

Access Lane: An access lane is located adjacent to Harbor Boulevard along the western side of the SP Slip. This lane provides parking and access to the commercial fishing vessels docked in the adjacent slips.

Vehicles that utilize Timms Way and the access lane are generally associated with nearby commercial fishing, industrial, and other commercial land uses. Traffic volumes along these streets would be considered light to moderate during peak traffic hours.

The site would be easily accessed from area roadways, specifically, Harbor Boulevard. However, parking would be limited. Parking for the site would have to be supplied by the existing lots associated with the Ports O' Call Village. Additionally, turn-around and launch entry and exit would not be desirable. The area provides little space for launching and exit maneuvering.

Alternative Site C (Berth 95 Area)

The following roadways serve Alternative Site C and the immediate vicinity:

Harbor Boulevard: Harbor Boulevard is the primary arterial route in the vicinity of Berth 95. It is a 4-lane north-south arterial that serves as a major travel route between Berth 95, the regional freeway network just north, and the surrounding communities of San Pedro and Wilmington. On-street parking is allowed in selected areas. Left-turn and right-turn lanes are provided at intersections. The intersection with Swinford Street is signalized.

Swinford Street: Swinford Street is a 2-lane east-west roadway that provides access to the Los Angeles World Cruise Center, the Catalina Channel Express, and the Merchant Marine Vessel *Lane Victory*.

Large parking lots utilized by the Catalina Express and Los Angeles World Cruise Terminals are located within and adjacent to Berth 95. Although these large parking lots exist adjacent to the site, the areas are leased to aforementioned private companies and are used by patrons of those companies. The Port could negotiate an agreement that would allow the Port to use dedicated space in the adjacent parking lots for tow vehicles and attached trailers. The area roadways would provide adequate access to a boat launch site and these parking areas should the Port obtain the rights to use them.

Alternative Site D (Berth 161 Area)

The following roadways serve Alternative Site D and the immediate vicinity:

Harry Bridges Boulevard: Harry Bridges Boulevard is a 4-lane east-west roadway and is located along the southern boundary of the Wilmington community. The intersection of Avalon Boulevard and Harry Bridges Boulevard is signalized, and would serve as a major access point to the site.

Fries Avenue: Fries Avenue is a 4-lane north-south roadway that would provide direct access to the site. The intersection of Fries Avenue and Harry Bridges Road is signalized. Parking is not allowed on the shoulder of Fries Avenue.

La Paloma Street: La Paloma Street is a 2-lane access road. The intersection of La Paloma Street and Fries Avenue is not signalized. There is room for street-side parking on the shoulder of La Paloma Street.

Primary access to the site from the Wilmington Community would be provided via Harry Bridges Boulevard and its connection with the southbound section of Fries Avenue. Direct access to a boat launch would be provided from La Paloma Avenue, which connects to a series of short driveways that run through the adjacent industrial and boat repair yards. The majority of the area surrounding the site is occupied by existing structures, businesses, and associated work yards. Parking lots near the site have been constructed; most, however, are private lots utilized by adjacent businesses.

Alternative Site E (Berth 183–184 Area)

The following roadways serve Alternative Site E and the immediate vicinity.

Harry Bridges Boulevard: Harry Bridges Boulevard is a 4-lane east-west roadway that runs along the southern boundary of the Wilmington community; it would serve as a major access point to the site. The intersection of Harry Bridges Boulevard and Fries Avenue is signalized.

Fries Avenue: Fries Avenue is a 4-lane north-south roadway that would provide direct access to the site. Parking is not allowed on the shoulder of Fries Avenue. The intersection of Fries Avenue and Harry Bridges Boulevard is signalized.

Avalon Boulevard: Avalon Boulevard is the primary arterial route in the vicinity of the site. It is a 4-lane north-south arterial that serves as a major travel route through the community of Wilmington; it would serve as a major access road to the site. On-street parking is allowed and left-turn and right-turn lanes are provided at intersections. The intersection with Harry Bridges Boulevard is signalized and operates at LOS A during the a.m. and p.m. peak traffic hours. The a.m. peak hour accounts for 1,054 trips at the intersection, and the p.m. peak hour accounts for 1,281 trips.

Water Street: Water Street is a local access road and would provide direct access to a boat launch. Water Street is a 2-lane roadway that runs east and west and provides access to the adjacent auto terminal and liquid bulk industrial facilities.

Alternative Site F (Berth 200 G-H)

The following roadways serve Alternative Site F and the immediate vicinity:

Alameda Street: Alameda Street is a 4-lane arterial roadway that runs from the northeast to the southwest and is located just north of the site. Alameda Street is one of four arterials that provide direct access from the Port to the San Diego Freeway (405). North of the 405, Alameda Street serves as a major corridor between the Port and the City of Los Angeles.

Henry Ford Avenue: Henry Ford Avenue is a 4-lane north-south arterial. Henry Ford Avenue intersects Anaheim Street and Alameda Street south of Pacific Coast Highway.

Alternative Site G (Berth 200Z Area)

Access to the site would be provided from the community of Wilmington via Henry Ford Road to Anchorage Road, which runs east-west adjacent to the Cerritos Channel. Anchorage Road intersects with Shore Road, which would provide direct access to a boat launch site. Presently, adequate parking does not exist adjacent to the project site. However, the site is surrounded by undeveloped, unimproved land, which would provide adequate space for the construction of a parking facility.

Alternative Site H (Berth 204 Colonial Boat Works)

Access to the site would be provided from the community of Wilmington via Henry Ford Road to Anchorage Road, which runs east-west adjacent to the Cerritos Channel. Direct access to a boat launch site would then be provided via Anchorage Road. The existing launch ramp, however, is difficult to access because it is located immediately between Anchorage Road and the Cerritos Channel.

Alternative Site I (Berth 193–194 Area)

Access to the site is available from the same major arterials that serve the Alternative Site E. A boat launch site would be accessible by roadways that would provide good entry and exit points. Additionally, the vacant land within the launch site would provide adequate area to place a parking lot.

Impacts and Potential Mitigation

All Potential Sites

Traffic Generation

A boat launch would not generally require any significant in-street construction impacts that would cause substantial temporary traffic impacts, temporary loss of access, or temporary loss of bus stops, or that would require the rerouting of bus lines. Such impacts are anticipated to be less than significant, but would be assessed as part of further analysis of a specific launch site.

Using the general assumptions discussed at the beginning of this chapter, a boat launch is expected to increase average daily trips by approximately 120 vehicles, which would be staggered throughout the day. At most local intersections, the existing roadway segments and intersections would accommodate the increase in automobile traffic with significantly increasing V/C ratios. The addition of up to 40 vehicles during weekday or weekend peak hours is not expected to result in significant impacts. Additionally, no increases to demand-to-capacity ratios are anticipated due to the low project-related traffic volumes during any given

period. Boat launch traffic would not trigger an analysis at any CMP monitoring stations. Accordingly, no CMP traffic impacts are anticipated to result.

Traffic Safety

Each potential site has varying levels of existing and future pedestrian and vehicular activities. Since most of the local area roadways are in industrial areas of the Port, bicyclists are not typically encountered. Pedestrian safety impacts would require evaluation as part of future site planning at any of the potential launch sites. It is possible that intersection re-striping and/or signalization timing modifications would be required at some of the launch site intersections.

Transit

A boat launch would not increase demand for available transit capacity. No impact would result.

Parking

A boat launch site would incorporate a parking lot to accommodate at least 40 tow vehicles and trailers. Because boat launch users would be staggered throughout the day, the provision of 40 parking spaces at any of the potential sites is expected to be adequate to serve the expected 120 daily users. Without parking capacity at a proposed lot, arriving boaters would not be permitted to launch.

Vessel Navigation

A proposed boat launch would increase existing small vessel traffic within the waters of the Port. Each potential launch site is ranked in terms of transit to Outer Harbor (see Table 5-1). All boats using a boat launch facility would be required to comply with all safe boating regulations and law enforcement requirements set forth by the Port Police and United States Coast Guard. Compliance with these rules and regulations would ensure current safety levels are maintained. Impacts would generally be considered less than significant.

Alternative Site A (Berth 56)

The existing traffic volumes and width of Miner Street could present difficulties in regards to congestion and traffic access to a boat launch facility. The site would not provide an adequate area for launch queuing, and traffic attempting to access a boat launch site would likely back up onto 22^{nd} Street and possibly onto Miner Street. These effects would likely cause significant amounts of traffic congestion along 22^{nd} Street and portions of Miner Street. This would be considered a significant impact.

Potential amelioration of these impacts would stem from completion of the Cabrillo Way Marina project. Because area roadways and access along Miner and 22^{nd} Streets would be improved, the traffic impacts associated with a boat launch site may be reduced. However, these improvements would likely not reduce impacts to less than significant levels.

Although an 89-acre vacant lot (unpaved) is located across 22nd Street to the north, the available onsite lot is not adequate to support a launch project. A boat launch site could result in a significant impact related to parking availability. If nearby offsite parking could be located, this impact could be reduced to a less-than-significant level.

The Port would be required to mitigate for the increased traffic delays and lack of adequate access and parking on site. Mitigation could take the form of one or more of the following measures: realignment or widening of adjacent roadways to accommodate increased traffic; provision of parking facilities that would accommodate tow vehicles and trailers; incorporation of a reservation system; and/or incorporation of a manned and gated entry point.

Alternative Site B (SP Slip)

The site would be easily accessed from area roadways—specifically, Harbor Boulevard. However, parking and direct access to the site would be severely limited. Parking for the site would have to be supplied by the existing lots associated with the Ports O' Call Village. Additionally, turnaround and launch entry and exit would not be desirable. The area provides little space for launching and exit maneuvering.

Alternative Site C (Berth 95 Area)

Large parking lots utilized by the Catalina Express and Los Angeles World Cruise Terminals are located within and adjacent to Berth 95, and area roadways would provide adequate access to the site. Parking, however, would be limited because the large lots that exist adjacent to the site are leased to private companies and are utilized by patrons of those companies. Therefore, impacts associated with access would be considered less than significant, but the lack of onsite parking could require mitigation.

Alternative Site D (Berth 161 Area)

Primary access to the site from the Wilmington Community would be provided via Harry Bridges Boulevard and its connection with the southbound section of Fries Avenue. Direct access to a boat launch would be provided from La Paloma Avenue, which connects to a series of short driveways that run through the adjacent industrial and boat repair yards. The majority of the area surrounding the site is occupied by existing structures, businesses, and associated work yards. Parking lots near the site have been constructed; most, however, are private lots utilized by adjacent businesses. Parking would likely be limited and access to the site would be difficult. Because access to the site would be constricted through the narrow La Paloma Street and other smaller driveways and access roads, impacts associated with traffic circulation would be considered significant. Because the site is not located adjacent to an adequately sized parking lot and is

not large enough to accommodate a parking lot, impacts associated with parking could require mitigation.

Alternative Site E (Berth 183–184 Area)

Access to a boat launch site from the community of Wilmington to the north would be provided from either Avalon Boulevard or Fries Avenue to Water Street. Harry Bridges Boulevard would provide access from the east and west. Arterial access from the south is not applicable due to the lack of residences and Port operations.

Direct access to the site could be provided at the intersection of Fries Avenue and Water Street. Launch site parking for tow vehicles and trailers could be provided north of Water Street on a currently unimproved lot.

In general, the site has relatively poor accessibility from the freeway and is subject to extensive truck and rail traffic encumbrances. The site has low to moderate potential to accommodate an adequate layout for circulation, queuing and parking. Additionally, the site is some distance to open water and could experience potential vessel conflicts.

Alternative Site F (Berth 200 G-H)

No roadways would provide direct access to the project site. The site would be located in an area that would be difficult to access. Although parking would likely be plentiful, access issues could result in significant impacts.

Alternative Site G (Berth 200Z Area)

Access to the site would be provided from the community of Wilmington via Henry Ford Road to Anchorage Road, which runs east-west adjacent to the Cerritos Channel. Anchorage Road intersects with Shore Road, which would provide direct access to the launch site. Presently, adequate parking does not exist adjacent to the project site. However, the site is surrounded by undeveloped, unimproved land, which would provide adequate space for the construction of a parking facility.

Alternative Site H (Berth 204 Colonial Boat Works)

Access to the launch site would be provided from the community of Wilmington via Henry Ford Road to Anchorage Road, which runs east-west adjacent to the Cerritos Channel. Direct access to the launch site would then be provided via Anchorage Road. The existing launch ramp, however, is difficult to access because it is located immediately between Anchorage Road and the Cerritos

Channel. Vehicles attempting to utilize the ramp would interfere with traffic on Peninsula Road and possibly on Anchorage Road. Additionally, parking in the area is generally limited because of use by recreationalists who maintain boats in nearby slips.

Alternative Site I (Berth 193–194 Area)

Access to the launch site is available from the same major arterials that serve the Alternative Site E, with direct access from Yacht Street. The launch site would be accessible by roadways that would provide good entry and exit points. Additionally, the vacant land within the proposed launch site would provide an adequate area to place a parking lot. Circulation in regards to the launch site would require evaluation in order to avoid conflicts with any of the fireboats at the adjacent Fire Station No. 49 on Yacht Street.

5.2.3 Meteorology and Air Quality

Setting Applicable to All Potential Launch Sites

The daytime prevailing wind at the Port is from the Pacific Ocean. This wind action carries clean air from the Pacific toward the Port, and less-clean air from the Port to the inland area. Mobile and stationary sources that include ships and other vessels, landside transport vehicles, and cranes are the most common air pollution sources within the Port. Other sources of air pollution include byproducts from welding, petroleum storage, secondary metal recovery, and other industrial and commercial facilities (LAHD 1997).

Impacts and Potential Mitigation

All Potential Sites

A generalized launch site project was analyzed to determine if construction of the site or daily operations would emit significant volumes of pollutant emissions. More specifically, the emissions from tow vehicles and boats were analyzed to determine potential impacts.

Construction Emissions

Any project construction period overlap with the construction phases of the Cabrillo Way Marina would result in emissions that would exceed the SCAQMD thresholds. The maximum daily emissions associated with construction of the Cabrillo Way Marina will exceed the SCAQMD's daily and quarterly significance thresholds for ROG, NOx, CO, and PM_{10} . Consequently, any contribution to this is considered a significant impact. The project construction emissions would be significant and subject to the same mitigation as the Cabrillo

Way Marina construction project. Although mitigation could reduce impacts of PM_{10} , impacts from emissions of ROG, NOx, and CO would not be reduced, and would be significant and unavoidable.

Operational Emissions

A launch site would accommodate up to 120 boat launches and 120 boat recoveries per day. Associated emissions would result from tow vehicles accessing the site, actual launching of vessels, and the engines utilized to propel each boat. A proposed boat launch would result in an increase in emissions of ROG, NO_x , CO, PM_{10} and SO_x as shown in Table 5-2, primarily through increased boat operations, but also because of increases in motor vehicle trips. Similar to the Cabrillo Way Marina project, the launch operations would generate increases in ROG, NO_x and CO emissions that exceed the SCAQMD thresholds of 55 (ROG and NO_x) and 550 (CO) pounds per day. The impacts associated with ROG, NO_x and CO emissions would remain significant and unavoidable.

From Table 5-2, it is clear that the largest single source of emissions is boats. Several assumptions used for this analysis resulted in a very conservative (high) boat emission estimates. Those assumptions included:

Uncontrolled outboard engines. The above analysis assumes that all 2-stroke and 4-stroke outboard engines are carbureted. Although new technologies (including direct injection 2-stroke engines, and 4-stroke engines with catalytic converters and electronic fuel injection and timing) are becoming much more popular, no attempt was made to quantify their use in either the existing or future boat fleet.

Emission Source	ROG	NOx	CO	PM ₁₀	SOx
2-stroke boat	10,395	105	20,027	677	12
4-stroke boat	868	515	14,400	7	8
Tow vehicles	3.36	3.06	51.98	1.62	0.01
Total	11,266	623.06	34,478.98	685.62	20.01

Table 5-2: Predicted Launch Facility Operational Emissions (lbs./day)

A proposed boat launch would exceed the Allowable Regional Emission Limits set forth by the South Coast Air Quality Management District. Impacts would be significant, and no mitigation is available to reduce impacts to less than significant levels.

Odors

Construction and operation of the Port are not normally associated with odor issues. Odors are typically associated with industrial or institutional land uses, as listed in SCAQMD's CEQA Handbook. Consequently, a proposed boat launch would not generate significant odor impacts.

Alternative Site A (Berth 56)

Alternative Site A would be located near a variety of potentially sensitive receptors in regards to air quality. An existing fire station (No. 110) near the end of Harbor Boulevard is located approximately 0.5 mile to the north of the site. Other state facilities in the vicinity of the project site include the Department of Justice Federal Corrections Institution and the United States Coast Guard Base, which are located on Reservation Point, within 1 mile of the launch facility. Also near the site are residential units, which are located along the bluffs adjacent to Crescent Avenue, and short-term/non-permanent residential uses (including liveaboards in the existing Watchorn Basin and Cabrillo Marina, as well as visitors staying at the Hilton Hotel). All persons residing within these areas would be considered potentially sensitive receptors. The visitors of the hotel and persons living aboard boats docked in the West Channel would be considered "transient" sensitive receptors.

Alternative Site B (SP Slip)

The launch site would be located near some sensitive receptors in regards to air quality. Residents are located between Beacon Street and Pacific Avenue to the west, and other sensitive receptors are located along the west side of Harbor Boulevard, which includes multi-family residences south of 12th and 13th Streets.

Alternative Sites C through I

The launch sites would not be located near any sensitive receptors, yet would be subject to the same construction and operational emissions mitigation as the proposed project.

At any potential launch site, air quality impacts would remain significant and unavoidable after mitigation.

5.2.4 Noise

Setting Applicable to All Potential Launch Sites

The existing noise environment in the Port results from a wide variety of sources. Primary noise sources at the Port include bulk loading facilities, handling equipment for shipping containers, vehicular traffic, and marina boat activities. The sounds of ship engines and distant trains contribute to the steady-state noise emanating from the Port. This low-level steady noise is punctuated by occasional ship whistles, train horns, and other intermittent operations (ACOE 2000). The varying noise environments are also affected by vehicular traffic on the local streets and sporadic aircraft flyovers.

Alternative Site A (Berth 56)

There are a number of sensitive residential receptors located adjacent to, and in the vicinity of, this potential site. The nearest residential receptors are located within the San Pedro Bluffs to the north and at Fort MacArthur to the west. Sleeping quarters at the LAFD Fire Station No. 110 (located at the end of Miner Street adjacent to the launch site) are also considered to be noise-sensitive. Additionally, it should be noted that short-term/non-permanent residential uses, which includes liveaboards in the existing Watchorn Basin and Cabrillo Marina as well as visitors staying at the Hilton Hotel, are considered "transient" sensitive residential receptors.

Alternative Site B (SP Slip)

Potential sensitive receptors in the vicinity of the SP Slip are located along the west side of Harbor Boulevard, which includes multi-family residences south of 12th and 13th Streets. John S. Gibson Jr. Park and San Pedro Peninsula YMCA Bloch Baseball Field are located along the east side of Harbor Boulevard, south of 13th Street, and may be negatively impacted by noise created from the launch site.

Alternative Site C (Berth 95 Area)

The existing noise environment associated with Berth 95 results from a wide variety of sources on the project site and in the surrounding Port waters. Berth 95 is particularly affected by automobile traffic utilizing the Vincent Thomas Bridge that is located directly overhead.

No sensitive receptors are located near Berth 95. Land uses near the site include the Catalina Channel Express building, the Los Angeles World Cruise Terminals, and the *Lane Victory*.

Alternative Site D (Berth 161 Area)

Berth 161 is not located near any sensitive receptors. Specific land uses surrounding the site that contribute to the noise environment include a liquid bulk industrial site to the south; a boatyard, repair facility and associated structures to the east and northeast; boat slips to the north, and a large, paved parking area and rail yard across port waters to the west.

Alternative Site E (Berth 183–184 Area)

Land uses surrounding the site that contribute to the noise environment include the community of Wilmington and a liquid bulk industrial site to the north; Omni Terminal to the south; railways and roads to the west; and Paktank Liquid/Dry Bulk and the Banning's Landing Community Center over 700 feet to the east. The only sensitive receptor in the area would be the Banning's Landing Community Center during intermittent community events.

Alternative Site F (Berth 200 G-H)

The existing noise environment around the site is dominated by traffic noise from area roadways such as Alameda Avenue and Henry Ford Avenue. Additional noise results from Port activities at the adjacent auto terminal. The site is not located near any sensitive receptors in regards to noise.

Alternative Site G (Berth 200Z Area)

The existing noise environment is generally similar to that described for Alternative Site F.

Alternative Site H (Berth 204 Colonial Boat Works)

The existing noise environment is generally similar to that described for Alternative Site F.

Alternative Site I (Berth 193-194 Area)

Potential sensitive receptors in the vicinity of this site are located north of and adjacent to the site. The City of Los Angeles maintains Fire Station No. 49 immediately north of and adjacent to the proposed launch site. Additionally, the University of Southern California (USC) maintains a boathouse to the north. All other land uses surrounding the site consist of industrial and heavy commercial uses.

Impacts and Potential Mitigation

All Potential Sites

Construction Noise

Although construction activities would last greater than a single day, construction of a boat launch is expected to be minimal at any potential launch site. In general, no noise-sensitive land uses exist adjacent to the potential sites. Most of the uses throughout the Port consist of warehousing, commercial, and industrial operations. Sensitive land uses (in terms of noise) are generally sufficiently distanced and buffered by intervening structures so as not to be affected by construction noise associated with a boat launch. Construction of a proposed boat launch would not occur between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, or before 8:00 a.m. or after 6:00 p.m. on Saturday. Construction would not occur on any Sunday and impacts would not occur. Noise impacts to sensitive receptors are not anticipated to be significant. Most potentially sensitive receptors are sufficiently insulated from any noise increases associated with a launch site by distance, intervening structures, and their own noise-insulated construction.

Operational Noise

Noise produced from activity at a launch site would result from increased automobile traffic and motor sounds associated with boat engines. This increased noise, however, would be expected to be masked by the existing noise environment of the Port. Additionally, the noise produced would not be expected to punctuate the existing noise environment and would not be significantly audible over the ambient noise conditions. A proposed boat launch at any of the potential launch sites would be sufficiently distanced from the nearest affected uses or residences and no significant impacts are anticipated.

5.2.5 Aesthetics/Light and Glare

Setting Applicable to All Potential Launch Sites

The launch sites would generally be located adjacent to various mixes of commercial, industrial, and vacant land uses. Warehouses, liquid bulk tanks, maritime uses, and a variety of work and storage yards associated with businesses surround the sites

The potential launch sites are characterized by the same general lack of aesthetic quality found throughout most of the Port. The same regulatory setting, analysis methodology, and thresholds of significance described in Chapter 3.5, "Light and Glare," and Chapter 3.6, "Aesthetics," apply to all launch sites.

Impacts and Potential Mitigation

All Potential Sites

Light and Glare

A boat launch at any site would not result in a substantial perceptible change in ambient illumination levels at adjacent and nearby receptors. The potential sites are not located in areas that would be affected by changes in ambient illumination. A boat launch would not require substantial lighting other than what could be necessary for safety and security, as determined by the Port. Use of a launch site would not introduce light sources where they do not currently exist. Surrounding and nearby properties in the launch site vicinities are not light-sensitive. A boat launch would not result in substantial spill lighting even if facility lighting is necessary for security or safety reasons.

Shade and Shadow

The potential launch facilities would likely include only a restroom building, which does not have the potential to create shade or shadow impacts. No shadeor shadow-sensitive uses exist in the vicinity of the potential sites.

Aesthetics

The potential launch sites and vicinities contain no visually important features, open spaces, or views. The potential launch sites contain no valued visual elements or existing features that would be considered scenic. A boat launch facility would be very small in scale and would not contrast with the existing features at any of the sites.

A boat launch would not require the grading or development of any natural open space at any potential site, nor would a launch site be located on or near any natural open spaces.

Alternative Site A (Berth 56)

Berth 56 is surrounded by commercial and industrial land uses and associated parking lots. Typical buildings immediate adjacent to the site consist of the Crescent Warehouse Company, warehouses along Signal Street, a vacant unimproved lot across 22nd Street, and the waters of the East Channel. The site would be located near portions of Harbor Boulevard that are considered a Scenic Highway; however, a launch facility would not impact views of significant portions of Harbor Boulevard, the coast, or any scenic viewshed. The launch site does not afford views of Harbor Boulevard, or any scenic viewshed. The site is not surrounded by any land uses that would be considered visually appealing. Therefore, the launch site would not impact any significant visual or aesthetically pleasing resources and significant impacts to visual resources would not occur.

Alternative Site B (SP Slip)

The SP Slip is located in an area of the Port that is characterized by commercial fishing and the commercial/retail Ports O' Call Village. The SP Slip is visible from Harbor Boulevard and from local roadways and certain residential areas located on the bluffs to the west. Notably, the portion of Harbor Boulevard adjacent to the launch site is considered a scenic highway; however, a launch facility would not impair views from Harbor Boulevard toward the Port, nor would it impair views of Harbor Boulevard from the Port. The site does not contain any visually appealing resources; however, the launch site would be visible from portions of the John S. Gibson Jr. Park, which is located adjacent to the east of the site stretches from 13th Street to 3rd Street. Location of the launch site within the SP Slip would not result in significant impacts.

Alternative Site C (Berth 95 Area)

Alternative Site C is located in an area of the Port that is characterized by parking lots, a historic resource, and berthing for the Catalina Flyer and Los Angeles World Cruise Terminals. The site is not visible from the nearest roadway, Harbor Boulevard, and is minimally visible from the Vincent Thomas Bridge overhead. The site does not contain any visually appealing resources and does not afford views of or toward any recognized aesthetically significant resources. Utilization of the site for a boat launch facility would be consistent with the existing viewshed of the surrounding land use patterns and construction of the area. No significant impacts in relation to visual or aesthetically significant resources would result.

Alternative Site D (Berth 161 Area)

The launch site would be located adjacent to an area of predominant industrial uses. Warehouses, liquid bulk tanks, and a variety of work and storage yards associated with industrial businesses surround the site. The site is not located in an area that would be considered visually or aesthetically pleasing. Rather, the area appears rundown and does not provide any scenic or visually appealing resource. Additionally, the site does not afford views to, nor can the site be seen from, any scenic corridor, highway, or public area. Use of the site as a launch site would not impact any visually important resource and impacts would be considered less than significant.

Alternative Site E (Berth 183–184 Area)

The site is not located in an area that is considered visually or aesthetically pleasing. Additionally, the site does not afford views to, nor can the site be seen from, any scenic corridor or highway. Use of the site as a launch site would not impact any visually important resource or introduce light sources where they do not currently exist.

The project site contains no valued visual elements or existing features that would be considered scenic. A boat launch would require the removal of a rundown structure on a small pier that extends into the water. These structures, however, do not contribute any aesthetic value to the site. A boat launch facility would be very small in scale and would not contrast with the existing features of the area. Additionally, the area surrounding the project does not represent any valued aesthetic images. A proposed boat launch would be consistent with the existing zoning of the area and would not detract from the existing style or image of the area.

Alternative Site F (Berth 200 G-H)

The launch site would be located adjacent to an areas used for auto and lumber storage and shipping. The site is surrounded by paved lots to the north and the waters of the Consolidated Slip to the south. The site is not located in an area that would be considered visually or aesthetically pleasing. Additionally, the site does not afford views to, nor can the site be seen from, any scenic corridor or highway. Use of the site as a launch site would not impact any visually important resource.

Alternative Site G (Berth 200Z Area)

The launch site would be located adjacent to an area presently used as a marina to the south and vacant land on all other sides. The site is not located in an area that would be considered visually or aesthetically pleasing. Additionally, the site does not afford views to, nor can the site be seen from, any scenic corridor or highway. Use of the site as a launch site would not impact any visually important resource.

Alternative Site H (Berth 204 Colonial Boat Works)

The launch site would be located within an existing marina complex. The existing facilities are not located near to any existing scenic highway or corridor, nor would the site afford views of any scenic viewshed. The launch site would be considered a use consistent with the existing boat slips to the west. Immediately south of the site are the waters of the Cerritos Channel. To the east and north of the site beyond Shore Road is a large, unimproved vacant parcel. The site is not surrounded by any land uses that would be considered visually impacted.

Alternative Site I (Berth 193–194 Area)

The launch site is surrounded by commercial, industrial, and vacant land uses. The site does not contain and is not surrounded by any visually appealing land uses. Additionally, the launch site is not visible from any scenic roadways or specially designated highways. The launch site would be visible from surrounding land buildings such as the USC boathouse, the LAFD fire station, and the existing marina across the East Basin. The land use at the site presently consists of a debris yard, and a boat launch project would be considered an improvement over existing conditions.

5.2.6 Geology

Setting Applicable to All Potential Launch Sites

Because geologic conditions do not vary widely from one property to another for adjacent sites, it is generally assumed that geologic conditions underlying the various boat launch sites would be similar to other areas within the Port. No site-specific soils or geotechnical studies were conducted for the alternative launch sites.

A variety of seismic hazards can cause damage to property and artificial structures in the vicinity. The primary seismic hazards that could affect the Port include groundshaking, liquefaction, tsunamis, and seiches, which are described in Chapter 3.7, "Geology." As summarized from Chapter 3.7, the Port consists of segments of the active Palos Verdes fault. These segments pass under Los Angeles Harbor and are approximately 0.5-mile wide (POLA 1979). Although the precise location is unknown, data suggests the fault likely passes beneath the West Basin, the Vincent Thomas Bridge, Terminal Island, and Pier 400. Movement along the fault has exposed tertiary age bedrock in the adjacent hills near the harbor as well as through the port waters adjacent to Reservation Point. Other faults within the southern California region could potentially affect the project site. These include active faults and fault zones such as the Newport-Inglewood Fault, the San Pedro Fault, the Whittier-Elsinore Fault, the Santa Monica Fault, the Hollywood Fault, the Raymond Fault, the San Fernando Fault, the Sierra Madre Fault, the Cucamonga Fault, the San Jacinto Fault, and the San Andreas Fault (see Chapter 3.7, "Geology").

The bedrock within the Port is composed of well-consolidated clay shales (Malaga mudstone), and an overlying layer of Repetto siltstone. These units are overlain by younger compact sands and silty sands known as the Timms Point silt, the San Pedro formation, and the Palos Verdes sand. Additionally, recently deposited sands, clays, and silts, which are found within a few isolated patches of gravel, cover the bottom. These sediments are expected to range in thickness from less than one foot over the bedrock to hundreds of feet thick northeast of the Palos Verdes Fault (POLA 1979).

Impacts and Potential Mitigation

All Potential Sites

Geologic Hazards

A boat launch would not cause or accelerate geologic hazards that would result in substantial damage to structures or infrastructure. Implementation of a boat launch would not require significant alterations to the existing landforms or geologic conditions on any of the potential sites. Additionally, a boat launch would not involve the placement of any significant buildings, other than a restroom building. Subsurface conditions at each site would dictate the

geotechnical, engineering, and soils constraints that must be considered prior to development as a boat launch facility.

A boat launch facility would not create a significant geologic hazard to other properties by accelerating erosion. A boat launch would consist of a completely paved launch ramp and parking facility. Launch designs would not incorporate any design features that would leave bare ground. Impacts from erosion would not occur.

The potential launch sites are not located on distinct or prominent geologic or topographic features. No impacts to any prominent geologic or topographic feature would occur.

Seismicity

The potential launch sites are in the vicinity of the Palos Verdes Fault, which is known to be located under the Port, as well as in the vicinity of other faults in the Los Angeles region. Strong earthquake-induced ground shaking could be triggered by seismic activity on any of these faults. Seismic shaking could cause significant damage to all aboveground structures, pavements, and the launch ramp. However, because no structure proposed for human occupancy would be constructed onsite, and because the launch ramp and restroom facilities would be built in conformance with the most current Uniform Building Code, impacts related to seismic ground shaking would be minimal.

No faults within the area of the Port are currently zoned under the Alquist-Priolo Earthquake Zoning Act, but the Palos Verdes Fault lies beneath the harbor and could cause ground surface rupture in the harbor. The probability of surface rupture; however, would be considered remote.

Liquefaction

Because the potential launch site lie within the harbor environment, the potential for liquefaction and ground failure exists. However, because no structures proposed for human occupancy would be constructed onsite, impacts associated with liquefaction would be considered less than significant.

Seiches and Tsunamis

The potential launch sites would generally be located within the inland harbor zone adjacent to a confined body of water and near the Pacific Ocean. In the event of a tsunami, it is unlikely that the resultant wave action would impact the sites that are distant from the Outer Harbor. Alternative Sites A and B would be located near to the Pacific Ocean, which could result in greater impacts associated with the risk of tsunamis.

A seiche may result after a seismic event; however, because many of the sites would be located within smaller slips within the Port, significant damage is unlikely.

Landslides and Mudflows

The potential launch sites are not located near any geologic features that could result in landslides or mudflows.

5.2.7 Groundwater, Soils, and Sediments

Setting Applicable to All Potential Launch Sites

Unconsolidated sediments within the port make up the bulk of material in the harbor. Sediments can be divided into two groups: those that occur naturally, which were deposited throughout San Pedro Bay prior to development of the harbor, and those surface sediments that have been deposited in the various basins and channels since they were last dredged. Generally, the natural sediments vary in thickness from zero to hundreds of feet, but, in the Outer Harbor, sediments are generally continuous. Natural sediments within the Port waters are composed of sands, silts, and clays. Sediments vary in proportions, depending on their location within the Port. Various dredging projects and natural processes dictate what type of sediment will be deposited and in what location. The predominant material throughout the Port is silty sand. Surface sediments generally consist of a soupy and very soft muck composed of clay and silt, with minor amounts of sand (POLA 1979)

Impacts and Potential Mitigation

All Potential Launch Sites

The general impacts described below are applicable to all of the potential launch sites. However, subsurface conditions at each of the alternative launch sites would dictate the engineering and soils constraints that must be considered prior to development as a boat launch facility.

Groundwater

A boat launch facility would not require or result in the direct withdrawal of groundwater to accommodate water supply. All potable water needs would be met by existing water facilities at the potential sites. No deep excavation would be required for construction of the boat launch ramp at any site; therefore, no groundwater impacts would result.

A proposed boat launch would not result in the reduction of groundwater recharge capacity. Currently, the potential sites are mostly covered with impermeable surfaces and do not currently contribute to groundwater recharge. Development of one or more of the potential launch sites would not have an effect on the groundwater recharge capacity.

Soils and Sediments

No Phase I or Phase II environmental site assessments specific to the potential launch sites were available for review. It is currently unknown whether the sites previously contained some areas of soil contamination. Construction activities will generate waste, including both excavated soils and building materials such as wood, asphalt, steel, aluminum, and concrete. Some of this waste may be classified as hazardous waste. If determined necessary on a site-by-site basis, the relocation and replacement of sewer lines, storm drains, and utilities may include the excavation of contaminated soils, resulting in generation of hazardous wastes. However, disposal of these wastes would comply with applicable and appropriate laws and regulations regarding waste disposal.

A boat launch facility would not increase the frequency or severity of an accidental release of hazardous materials. No fuels or other hazardous materials would be stored onsite. Given the existing maritime vessels and waterside facilities at the potential sites, it is unlikely that a boat launch would increase the frequency or severity of an accidental release of hazardous materials. It is unknown whether the existing uses generate or use hazardous materials, but a proposed boat launch would exclude such uses.

A boat launch facility would not accelerate natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition that would not be contained or controlled onsite. Potential construction-related erosion impacts could occur, particularly during cut/fill activities, construction of bulkheads, and demolition of the site structures. However, all project-related activities would be required to comply with RWQCB and NPDES permit regulations. The Port would prepare a SWPPP, which is part of the NPDES permit requirements, in order to specify best management practices for temporary erosion controls and to mitigate impacts.

5.2.8 Water Quality and Oceanography

Setting Applicable to All Potential Launch Sites

The Los Angeles Harbor consists of the Inner Harbor (which is north of Reservation Point), and Outer Harbor (which is south of Reservation Point and extends to the San Pedro, Middle, and Long Beach Breakwaters). Due to its location, the West Channel area can be considered to be the Inner Harbor in terms of water quality and oceanographic parameters. The Outer Harbor is characterized by a large clockwise eddy between Terminal Island and the Middle Breakwater. A small counterclockwise eddy exists near Cabrillo Beach and Los Angeles Harbor (ACOE 1992).

The potential launch sites would be located in the marine environment of Los Angeles Harbor. Water quality in the Los Angeles Harbor is primarily affected by climate, circulation, biological activity, surface runoff, effluent discharges, and accidental discharges of pollutants related to shipping activities, including benthic disturbance and fuel spills. Water quality outside the harbor is influenced by water flushed from the harbor, inputs from other watersheds, discharges from publicly owned treatment works (POTWs), industrial and power plant discharges, coastal ocean circulation, and vessel activity. The Los Angeles Harbor environment has been physically modified through past dredging and filling projects, as well as through the construction of breakwaters and other structures.

The Los Angeles Harbor is adjacent to Long Beach Harbor; oceanographically, they function as one unit due to an inland connection via Cerritos Channel and because they share Outer Harbors behind the San Pedro, Middle, and Long Beach Breakwaters. The combined Los Angeles/Long Beach Harbor oceanographic unit has two major hydrologic character divisions. The southern California coastal marine environment, known as the Southern California Bight, primarily influences the harbor. The main freshwater influx into the harbor is through Dominguez Channel, which drains approximately 80 square miles of urban and industrial areas. Another freshwater contributor to the harbor is the discharge of treated sewage from the Terminal Island Treatment Plant into the Outer Harbor (ACOE 2000). In addition, there are several major storm drains that empty into the harbor.

Water quality at the potential launch sites would be influenced by water temperature. Because the launch sites are located in the Inner Harbor area, water temperature would be warmer relative to the outer portions of the Harbor. Accordingly, it is expected that the salinity, pH, and turbidity would be higher and the levels of dissolved oxygen would be lower. These facts would generally result in average-to-poor overall water quality (LAHD 1997).

Impacts and Potential Mitigation

All Potential Launch Sites

Water Quality

A boat launch facility would not cause discharges that create a pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code. Contaminants could be released into the water column during the construction and operational phases; however, any construction-related increase in contaminant levels in the water would be very localized and of short duration. Operationally, a boat launch is not expected to create any new sources of pollution, contamination, or nuisance discharge. However, any increase in boating activity could increase the illegal discharge of boater-generated sewage, which has a large impact on water quality, especially if vessels dump wastes overboard in confined areas—such as harbors, marinas, coves, inlets, or sloughs. A boat launch facility, however, would not induce or create a condition whereby sewage is discharged to the harbor. Toilet facilities would be provided for the convenience of boat launch users at any of the potential launch sites. Therefore, water quality impacts from boat waste are expected to be less than significant.

DO levels in aquatic habitats are usually reduced by the introduction of high concentrations of suspended particulates. The construction of a boat launch would include some activities that would increase the amount of suspended particulates. However, these impacts would be minimal and short-term. Normal operation of a boat launch project would not result in the creation of any suspended particulates.

pH would likely decrease in the immediate vicinity of any construction activities that disturb the benthic environment adjacent to a potential launch site. This change is due to the introduction of reducing conditions found in the disturbed sediments suspended in the water column. However, seawater contains carbonic acid and boric acids as well as their salts and is, therefore, a buffer solution. This buffer solution would effectively negate any reduction in pH levels.

Depending on site-specific construction requirements, dredging and filling activities would increase turbidity in the immediate vicinity, but terrestrial and shoreline sources of turbidity would be controlled and minimized by implementing construction BMPs. Any turbidity impacts would be short-term and localized, with conditions quickly returning to pre-activity levels. Water quality impacts from turbidity are expected to be less than significant. No impacts to transparency during daily boat launch facility operations would occur.

Nutrients could be released into the water column during construction of a launch ramp at any potential site. The release of nutrients may promote nuisance growths of phytoplankton if operations occur during warm water conditions. However, a bloom is not likely to occur in response to the minor quantity of fill (i.e., 0.3–0.5 acre) required for a launch ramp. Impacts on water quality from nutrients are not expected to occur.

Any accidental spills of construction related materials that are not contained onsite and cleaned up could enter the harbor through the storm drains and degrade water quality. The spread and ultimate dispersal of the spill would depend on the physical properties of the material spilled (e.g., solubility and density), the volume spilled, the location of spill entry into the harbor, and the timing of the spill within the tidal cycle. The time of year is also important, since this influences tidal flushing. Evaporation of volatile products and flushing would further reduce concentrations.

Launch site development would increase the amount of impermeable surfaces in the immediate vicinity of some of the potential sites, which could increase pollutant loading in stormwater runoff. Surface pollutants such as motor oil, fuels, and other fluids emanating from tow vehicles and boats using the ramp and parking area could cause pollutant increases. However, all launch facility operations would be in conformance with requirements in the statewide NPDES General Permit. Additionally, The City of Los Angeles is covered under the municipal stormwater permit for Los Angeles County (LARWQCB Order No. 01-182) and is obligated to incorporate provisions of this document in City permitting actions. The municipal permit incorporates Standard Urban Storm Water Mitigation Plan (SUSMP) requirements and these include BMPs that may be applicable (determined on a site-specific basis) to launch facility operations and maintenance plans. Stormwater runoff exists at each potential launch site, and launch facility development would not increase impacts from stormwater runoff. Thus, boat launch operations would likely have negligible impacts on water quality through discharges of surface runoff.

A boat launch would not cause the release of toxic substances that would be deleterious to human, fish, bird, or plant life. Fuels, solvents, paints, and other similar substances used during construction could impact local surface water quality if they are accidentally spilled directly into the harbor, or if they reach receiving waters through the runoff collection and disposal system. However, boat launch facility construction would be undertaken in accordance with all State and local NPDES requirements. Adequate erosion control techniques would be used to prevent erosion and washoff of materials, and all requirements governing waste discharges in the appropriate permits would be met during construction. Good housekeeping practices would limit the possibility of accidental spills reaching receiving waters. Therefore, no significant impacts are expected.

The proposed boat launch operation would not include the storage or use of any toxic substances, including fuels. Other than illicit dumping or careless use of substances outside the influence or control of this project, there would be no potential for release of toxic substances. Launch site development would incorporate clearly visible signage informing boaters of the importance of safe fueling and the damage that fuel spills can cause to the environment. Signage would also convey the legal prohibitions (and penalties for willful violation) against disposing of sewage, hazardous substances, and solid wastes in any waters.

Oceanography

A boat launch facility would not be of a size or scale to alter any tidal pattern, water circulation, or flushing pattern in the Port. Similarly, a boat launch facility would not result in a substantial reduction or increase in the amount of surface water in Los Angeles Harbor. Launch ramp construction at the various potential sites would result in the filling of an estimated 0.3–0.5 acre of existing water area (as measured at +4.8 MLLW). The net loss of 0.3–0.5 acre of water area would not be a significant adverse impact from the perspective of water quality and oceanography.

5.2.9 Biota and Habitats

Setting Applicable to All Potential Launch Sites

The current Port-wide biological setting was determined in part from the biological surveys and reports contained in the *Deep Draft Navigation Improvements Final EIS/EIR* (ACOE and LAHD 1992) and other recent EIRs (LAHD 1997 and 1998). Most notably, the majority of information was obtained

from the *Port of Los Angeles and Long Beach 2000 Baseline Study*, and from site visits.

Examining the boat launch description in view of the existing biological settings generally identified impacts to biotic communities and habitats as a result of boat launch implementation. Launch site observations have not revealed any sensitive or protected species at any of the alternative sites. The sites are not expected to contain any sensitive benthic habitats. The sites generally consist of sedimentary benthic materials consisting of sands, silts, and clays. Species within this habitat would likely consist of polychaetes, shellfish, and other invertebrates. The likelihood of any sensitive biological species occurring in the affected areas is remote.

Impacts and Potential Mitigation

All Potential Launch Sites

Terrestrial Resources

Launch site development would not result in the loss of individuals, or the reduction of existing habitat, of a state or federal listed endangered, threatened, rare, protected, candidate, or sensitive species or a species of special concern. The potential launch sites do not contain any significant terrestrial biological resources. Development of the boat launch facilities would not have significant effects on any sensitive species. The federally protected least tern and brown pelican regularly use the harbor area. However, the potential launch sites are not considered critical areas for foraging by the least tern or brown pelican; therefore, neither dredging activity nor turbidity would affect these species. No other protected marine species normally occur, or are expected to occur, in the project area.

The potential launch sites do not contain wildlife or migratory corridors. The alternative sites are located in open water habitat and would not preclude movement of any species. Similarly, the launch sites do not contain any wetland habitat.

Marine Resources

Although the sites do not support any significant terrestrial biotic species, the sites do have the potential to contain biological resources within the adjacent harbor waters. The water column within Los Angeles Harbor as a whole also supports a variety of species. Due to the transient nature and mobility of these species, they may or may not be present adjacent to the potential launch sites at any given time.

Marine habitats could be impacted by construction of a boat launch at one of the alternative sites. These effects would result from filling approximately 0.3–0.5 acre of the harbor to accommodate the launch ramp and appurtenant structures. The loss of water surface area would be a significant adverse impact. However, the loss of habitat would be mitigated through use of the Los Angeles Harbor

Department's Inner Harbor Mitigation Bank (ACOE and LAHD 1984), as described in detail in Chapter 3.10, "Biota and Habitats." Credits are to be credited and debited at a ratio of 1:1 for additional areas of water created and lost in the Inner Harbor as measured at +4.8 MLLW (~Mean High Water). Following the boat launch construction impacts, and removal of 2.4 acres of water area at the Cabrillo Way Marina, the bank will still have a positive balance of over 3 acres. As a result of this excess balance of water area in the Inner Harbor, there would be no overall loss of marine habitat in the Inner Harbor because of the proposed landfill. The potential impact of the project landfill would be significant, but is reduced to less than significant levels by prior creation of water area in the Inner Harbor. The mitigation for this impact is the same as provided for the Cabrillo Way Marina under mitigation measure MM BIO-6.

Short-term construction impacts would be limited to common and abundant benthic organisms found in the launch ramp footprint. Specific to the waterside environment of the launch ramp at the potential sites would be a poured concrete slab substrate that angles down, away from the sites. The ramp and dock areas could provide surfaces for attachment of mussels and clams, species algae, and other invertebrate organisms. However, the launch facilities are not likely to provide any significant habitat for mobile organisms such as fish. At the terminus of the concrete slab, the substrate would consist of sediments, sands, silts, and clays.

At full buildout, the project would have minimal impacts to sensitive species or their habitats. A boat launch facility would not significantly increase the potential for impacts to sensitive species as a result of accidental spills. No fuel dock operations are proposed at the launch site. Specific impacts of illegal dumping by boaters would depend on the type (chemical composition) and quantity of the substance, exact location of entry into the harbor, and timing (both season and time of day relative to tidal cycle). In general, dilution, flushing, and evaporation of volatile materials would reduce concentrations to below toxic levels and ultimately remove the materials from the harbor. With appropriate operational controls at the launch ramp and compliance with existing laws, these events are considered unlikely and the potential impacts to sensitive species would be less than significant.

Alternative Site A (Berth 56)

Specific to the waterside environment of Alternative Site A is a rocky substrate that consists of riprap (large, loose rocks) that was placed as a bank stabilization measure. Riprap habitat provides a surface for the attachment of invertebrates and algae, and provides shelter for mobile organisms such as fish (MEC Analytical Systems 2002). Additionally, overstory macroalgae is also likely to occur at the many sites containing riprap within the Port. Giant kelp (*Macrocystis pyrifera*) feather boa kelp (*Egregia menziesii*), and sargassum (*Sargassum muticum*) occur within many of these areas.

The launch site contains a small kelp bed, which has attached to the rocky substrate. Kelp adds structural complexity to the water column and provides food, substrate, and shelter for a variety of vertebrate and invertebrate species (MEC Analytical Systems 2002). Additional habitat within the proposed launch site is provided by the cement pilings, which support adjacent pier/wharf structures. The pilings are likely to be colonized by species similar to those that colonize the riprap (LAHD 1997).

Any use of this site as a boat launch would result in negative impacts to the aquatic ecosystem within the riprap structure. However, incorporating the use of a boatlift as opposed to a launch ramp could reduce impacts.

Alternative Site B (SP Slip)

Alternative Site B is located in the SP Slip area, which is not likely to provide beneficial habitat to aquatic species. The site is likely to provide some habitat for species that live within the sediments of the harbor substrate. The proposed launch site does not contain any terrestrial biological resources. The site is completely developed and is surrounded by existing structures, roadways, and parking lots. Therefore, impacts associated with operation of the boat launch are expected to be limited.

Alternative Site C (Berth 95 Area)

The site would be located near Berth 95 adjacent to the Catalina Flyer Terminal. Marine organisms that are likely to occur within this environment consist of crustaceans, echinoderms, mollusks, polychaetes, and other invertebrates. The site presently contains a cement launch ramp that has been colonized by species of oyster and sea anemones. The species located onsite are not considered sensitive and the site does not provide habitat for any threatened or endangered aquatic species. Additionally, the alternative site does not contain any terrestrial biological resources. The site is completely developed and is surrounded by existing structures, roadways, and parking lots. Therefore, impacts associated with operation of a boat launch are expected to be limited.

Alternative Site D (Berth 161 Area)

The site would be located near Berth 161, adjacent to industrial land uses, docks, and boat slips. Thick, fouling communities that extend from the high water mark to the low water mark generally characterize pilings associated with docks. These communities generally consist of mussels, barnacles, colonial tunicates, and sponges. Pilings also have the potential to contain slipper shells, sea anemones, and starfish.

Although the site is likely to contain some concentrations of the abovementioned species, the site is not likely to contain any sensitive biological resources. Therefore, impacts associated with operation of the boat launch are expected to be limited.

Alternative Site E (Berth 183–184 Area)

The site does not contain any significant terrestrial biological resources. The only terrestrial vegetation is decorative landscaping that consists of a small grass area and what appears to be a number of fan palms (*Arecaceae filifera*) (McClintock 1993). The remaining site area is completely developed and is surrounded by existing shipping facilities, industrial uses, and associated parking lots.

Organisms that are likely to occur within the benthic environment near the launch site consist of crustaceans, echinoderms, mollusks, polychaetes, and other invertebrates. Although the site is likely to contain some concentrations of the above-mentioned species, the site is not likely to contain any sensitive biological resources. Therefore, impacts associated with operation of a boat launch at this site are expected to be limited.

Alternative Site F (Berth 200 G–H)

This alternative site is near Berth 200 G–H, adjacent to the auto terminal and near the outlet of the Dominguez Channel to the Port waters. The site does not contain any significant terrestrial biological resources, but the site does have the potential to support biological resources within the water column and benthic environment. Due to the influx of fresh water from the upstream channel, present species would be expected to be able to tolerate fluctuating salinity and varying water quality.

Organisms that are likely to occur within the benthic environment near the launch site consist of crustaceans, echinoderms, mollusks, polychaetes, and other invertebrates. Although the site is likely to contain some concentrations of the above-mentioned species, the site is not likely to contain any sensitive biological resources. Therefore, impacts associated with operation of a boat launch at this site are expected to be limited.

Alternative Site G (Berth 200Z Area)

The site would be located near Berth 200Z adjacent to vacant land and the East Basin Marina. The site does not contain any sensitive terrestrial resources. The site does support various weeds and grasses growing within the bare soil. The water environment appears to contain a bank stabilized by riprap, which transitions to unconsolidated sediments farther down in the water column.

Organisms that are likely to occur within the benthic environment near the launch site consist of crustaceans, echinoderms, mollusks, polychaetes, and other

invertebrates. Although the site is likely to contain some concentrations of the above-mentioned species, the site is not likely to contain any sensitive biological resources. Therefore, impacts associated with operation of a boat launch at this site are expected to be limited.

Alternative Site H (Berth 204 Colonial Boat Works)

The launch site does not contain any terrestrial biological resources. The site is completely developed and is surrounded by existing shipping facilities, industrial uses, and associated parking lots. The boat docks that extend into the water provide marine habitat within the proposed launch site. The associated pilings that support the boat docks are likely colonized by fouling communities and other species. Although the site is likely to contain some concentrations of common marine species, the site is not likely to contain any sensitive biological resources. Therefore, impacts associated with operation of the boat launch are expected to be limited

Alternative Site I (Berth 193-194 Area)

The launch site does not contain any terrestrial biological resources. The site is completely developed and is surrounded by existing shipping facilities, industrial uses, and associated parking lots. Trash and other debris are predominant in the adjacent harbor waters. Although the site environs could contain some concentrations of marine species, the site does not contain any sensitive biological resources. Therefore, impacts associated with operation of the boat launch are expected to be limited.

5.2.10 Cultural Resources

Setting Applicable to All Potential Launch Sites

Each of the potential launch sites has a distinct development history and structural inventory. Each site setting is discussed in relation to potential impacts in the following section.

Impacts and Potential Mitigation

Alternative Site A (Berth 56)

Berth 56 contains a small Mission style building (occupied by the Department of Fish and Game), which may have been part of the former Navy Landing or Supply Depot. Berth 57, which lies directly adjacent to the east of Berth 56, features a shed that appears greater than 50 years in age.

Berth 56 has not been the subject of specific archaeological resources; however, two archaeological studies have been conducted in the immediate vicinity. One study is considered an overview (ACOE et al. 1984) and the second study documents a pedestrian survey in which no resources were located (Weinman and Stickel 1978). Berth 56 has a low potential for on land resources, and there is no available information regarding the potential for submerged resources to occur.

Alternative Site B (SP Slip)

The SP Slip contains a single building that appears greater than 50 years in age. The building is located at the northwestern end of SP Slip (Utros Restaurant) and two additional structures are located along northeastern side of the slip across from Timms Way.

An archaeological survey has not been conducted at the SP Slip; however, a pedestrian survey was conducted adjacent to the location (Pierson 1980) and the area is addressed in an overview of the area (ACOE et al. 1984). Based upon the overview, this area is sensitive for archaeological resources.

If use of the site for a boat launch facility were to degrade adjacent culturally significant structures or require the demolition of these, significant impacts would result. However, if the site were used while simultaneously preserving the cultural integrity of the area, the project would not result in significant impacts to culturally significant resources.

Alternative Site C (Berth 95 Area)

Only buildings and structures that were recently constructed were viewed at this site; therefore, it is likely that historic structures do not exist. Because no land-based archaeological surveys have been conducted in regards to the launch site, the possibility for culturally significant resources remains. An overview addresses the area (ACOE et al. 1984) and an underwater study has been conducted (Pierson 1980). The underwater study consisted of a literature review in which earlier remote sensing data was analyzed. Numerous underwater anomalies were located in the vicinity and therefore, the area is considered sensitive for submerged resources. Additionally, the S.S. *Lane Victory*, which is a fully operational World War II victory ship, is docked approximately 75 yards offshore, but would not be impacted by launch site operations.

If use of the site for a boat launch facility were to degrade adjacent culturally significant structures, or require their demolition, significant impacts would result. However, if the site were used while simultaneously preserving the cultural integrity of the area, the project would not result in significant impacts to culturally significant resources.

Alternative Site D (Berth 161 Area)

The site contains at least one building/structure appearing greater than 50 years in age. The structure is located at Wilmington Marine. Underwater studies have not been conducted in the vicinity of the site, and no additional information regarding landside studies or resources is available.

Alternative Site E (Berth 183–184 Area)

The only buildings located within the site vicinity are recently constructed; no structures are greater than 50 years old. A shed once existed onsite, but it has since been demolished and the Catalina Freight building was constructed in its place. Also, it appears as though landfilling activity occurred at the head of Slip 5. The onsite structures and fill material do not require any historic evaluation and are not considered historically significant resources. No additional work would be required for historic structures

The site is located in an area of previous excavation and fill activity. The site is not located on or near any previously undisturbed landforms. Therefore, because the site has been previously disturbed, the probability for the unearthing of any cultural resource is extremely low. A single underwater survey using remote sensing techniques has been conducted in the vicinity of Berth 185 (Stickel 1982a). Based on this study the potential for submerged resources appears low. Impacts are considered less than significant.

Alternative Site F (Berth 200 G-H)

The site does not contain buildings/structures that appear to be greater than 50 years in age. Impacts would be considered less than significant.

Alternative Site G (Berth 200Z Area)

The site does not contain any buildings or within its boundaries. Thus, no additional work would be required for historic structures.

A single underwater survey that used remote sensing techniques has been conducted at this location. The survey was not able to locate any resources of cultural of historic significance (Stickel 1982b). Therefore, a boat launch would not result in any significant impacts to cultural resources.

Alternative Site H (Berth 204 Colonial Boat Works)

The Colonial Boat Works site contains two buildings/structures that appear to be greater than 50 years in age. Additionally, a single underwater survey that uses

remote-sensing techniques was been conducted at this location, at which time no resources were noted (Stickel 1982b).

Alternative Site I (Berth 193-194 Area)

The site, which lies adjacent to the south of the USC boat launch facility, contains only recently constructed buildings that are not considered historically or culturally significant. It appears that no additional work would be required for historic structures. A single underwater survey using remote-sensing techniques was conducted at this location. During the survey no significant resources were noted (Stickel 1982b).

5.2.11 Public Services and Utilities

Setting Applicable to All Potential Launch Sites

In an emergency situation, the potential boat launch sites would be served by the Los Angeles Fire Department, the Los Angeles Police Department, the Port of Los Angeles Police, and the United States Coast Guard. The Los Angeles Department of Water and Power (LADWP) would provide electrical and water services, and the County of Los Angeles Sanitation District would provide sewer and waste management services. No natural gas use is proposed at any of the launch sites.

Each agency charged with protecting the public (the LAFD, the LAPD, the Port Police, and the USCG) maintains specific standards, such as response times and levels of service, which must be adhered to during construction and operation of a project. Each public utility and public services agency, including the LADWP and the County Sanitation District, are guided by internal standards and policies that guide the provision of service to their customers.

Impacts and Potential Mitigation

All Potential Launch Sites

The alternative boat launch site infrastructure and utility availability rankings are provided in Table 5-1.

Law Enforcement

A boat launch facility at any of the alternative sites would not result in a land use that would exceed the service capacity and require the construction of new facilities or the hiring of new personnel within the LAPD or Port Police. The existing level of protection provided by the LAPD and Port Police is considered adequate (Webb pers. comm.) for all potential sites. Although there would be an increase in demand for public services due to the increased intensity of land uses compared to the existing conditions, the increase would not exceed the capacity for which the Port Police would be able to provide service. Impacts would be less than significant.

Fire Protection

The project would not result in a land use that would exceed the service capacity and require the construction of new facilities or the hiring of new personnel within the LAFD. Requirements to ensure adequate fire protection would be established by the LAFD based on their own review of the project. The typical fire flow for a commercial center is usually a minimum of 6,000 gpm; however, during the design review process, the LAFD would likely make a determination regarding the required fire flow for a boat launch project. Impacts would be less than significant.

Coast Guard

The project would not result in a land use that would exceed the service capacity and require the construction of new facilities or the hiring of new personnel within the USCG. The USCG would respond to emergency calls within Port waters, which includes those associated with a proposed boat launch at any of the potential sites. Additionally, the USCG would have sufficient resources and personnel to respond to any emergency calls at a launch site. Impacts would be considered less than significant.

Utilities

All potential launch sites are within the service area of the Los Angeles Department of Water and Power and, under the Los Angeles City Charter, LADWP has an obligation to serve its customers within the City of Los Angeles. A boat launch facility would require a minimal amount of electrical energy, which the LADWP would have sufficient capacity to provide. As part of the project design, all proposed onsite uses would incorporate required energy conservation measures as specified in Title 24, set forth by the State of California. This would reduce potential impacts to less-than-significant levels.

The demand for water associated with a boat launch would be extremely minimal. A launch facility restroom and boat wash area would create only a minimal demand for water, which would be met by existing infrastructure and supplies. Impacts would not occur.

Similarly, a launch facility would result in the generation of an extremely minimal amount of wastewater from an onsite restroom facility. The treatment capacity of the reclamation plant on Terminal Island would be more than sufficient to serve such a use. Impacts would not occur.

A boat launch facility would result in the generation of an extremely minimal amount of solid waste, and would comply with all applicable policies and regulations pertaining to the disposal of solid waste. Impacts would not occur.

Increased access to a boat launch site would result in the consumption of additional fossil fuels, specifically diesel and gasoline, which would be used to

power vehicles and boats. However, the increased use of boats and vehicle use within the Los Angles region would be considered negligible compared to the number of existing vehicles that use fossil fuels. Existing landside fueling stations and stations within the Port waters are expected to accommodate any increase in demand.

5.2.12 Recreation

Setting Applicable to All Potential Launch Sites

General site conditions at each of the alternative launch sites are summarized in the following sections.

Impacts and Potential Mitigation

All Potential Launch Sites

The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. A boat launch facility would not result in any residential development and would not generate any additional population. Rather, a proposed boat launch would provide existing residents of the San Pedro and Wilmington communities with a more convenient recreational boating opportunity. Therefore, the project would be considered a beneficial use, and impacts would not occur.

The project would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. Impacts would not occur.

Alternative Site A (Berth 56)

Berth 56 does not presently afford any recreational opportunities and the site does not contain an existing launch facility that is available to the public. Additionally, the site is located near the marina in Watchorn Basin and within 0.25 mile of the existing Cabrillo Marina Phase I and the 22nd Street Landing. Recreational activities within the marina areas consist of boating, sailing, recreational fishing and scuba diving, swimming, and sightseeing. The boat launch site would be consistent with the surrounding recreational opportunities. Therefore, use of Berth 56 as a boat launch facility would not result in significant impacts to recreational opportunities for the surrounding communities.

Alternative Site B (SP Slip)

The SP Slip does not contain any recreational opportunities for area residents within the San Pedro and Wilmington Communities. The site is located adjacent to the existing Ports O' Call Village, which provides commercial/retail and pedestrian pathways. The Ports O' Call Village contains wharf-side restaurants and shopping that would be considered passive recreational opportunities.

Additional opportunities for active recreation are provided at two nearby park facilities: the Bloch Field baseball diamond is located southwest of the launch site on the adjacent bluff, and the John S. Gibson Jr. Park, which stretches from 13th Street to 3rd Street, is located adjacent and east of the site. Location of the launch site within the SP Slip would not impact any recreational resource. Rather, the launch site would provide increased recreational opportunities for residents of the surrounding communities.

Alternative Site C (Berth 95 Area)

The site is not located adjacent to any areas designated for active recreation. The site would be located adjacent to the S.S. *Lane Victory*, which is a fully operational World War II victory ship. The ship is open to the public for tours 7 days a week, from 9:30 a.m. to 3:30 p.m. Additionally, 6 times a year the *Lane Victory* is available for cruises, and has accommodations for up to 800 passengers. It is not expected that use of the site as a boat launching facility would impact the *Lane Victory* as a recreational resource.

Alternative Site D (Berth 161 Area)

Alternative Site D and surrounding land uses provide no recreational use or benefit to the surrounding communities. Additionally, there are no recreational benefits within the general vicinity of the site. The nearest recreational facility is the marina that is located along Anchorage and Shore Roads, approximately 1 mile to the northeast. Use of Alternative Site D for a launch facility would provide residents of the Wilmington community access to an additional recreational site. However, use of the site would not be consistent with the surrounding land uses and may deter users.

Alternative Site E (Berth 183–184 Area)

The Port of Los Angles provides recreational opportunities to the public within many different areas under its jurisdiction. Recreational uses include sailing, boating, scuba diving, fishing, water skiing, swimming, and sightseeing. Recreational development is an important aspect of overall Port expansion and infill (ACOE 2000). Banning's Landing is the only the only surrounding land use that would be considered a recreational benefit to the surrounding communities. No other land uses within the project vicinity incorporate any

recreational use or benefit to the surrounding communities. The nearest recreational facilities to the proposed launch site are at the East Basin Marina, which is located along Anchorage Road and Shore Road, approximately 1 mile to the east. The launch site would provide additional recreational boating opportunities for the residents of Wilmington.

Alternative Site F (Berth 200 G-H)

The launch site would be located within 0.5 mile of the existing East Basin Marina. Additionally, the launch site would be located in an area that would provide adequate space for the facility. However, the launch site would be located a significant distance from the Pacific Ocean. The launch site would provide additional recreational boating opportunities for the residents of Wilmington.

Alternative Site G (Berth 200Z Area)

Recreational boating opportunities in the vicinity of the launch site are provided by the existing Consolidated Slip Marinas to the north and south of the site. No additional recreational opportunities exist within the vicinity of the launch site. The launch site would be consistent with the surrounding recreational opportunities and would provide the residents of the Wilmington community additional access to recreational boating facilities.

Alternative Site H (Berth 204 Colonial Boat Works)

The launch site would be located within an existing marina complex. Recreational opportunities in the area are associated with the marina and include boating, sailing, and other activities that can be undertaken from aboard personal watercraft. The launch site would not conflict with these uses.

Alternative Site I (Berth 193–194 Area)

Other than the adjacent USC boating facilities, the existing site and surrounding land uses do not provide any recreational use or benefit to the surrounding communities. The nearest recreational marina facility is located along Anchorage and Shore Roads, approximately 1 mile to the east. Therefore, use of the site for a launch facility would provide residents of the Wilmington community access to an additional recreational boating site. However, the industrial nature of the area and inconsistent land uses may deter users from enjoying the site.

5.2.13 Risk of Upset

Setting Applicable to All Potential Launch Sites

General site conditions at each of the alternative launch sites are summarized in the following sections.

Impacts and Potential Mitigation

All Potential Launch Sites

Impacts from risk of upset are briefly evaluated through a qualitative assessment of the potential for the project features to result in potential release or exposure to hazardous materials or explosion. The potential to expose project-related features and users to hazardous conditions from existing facilities on the project site and in the surrounding area is also assessed. Specific attention is paid to "vulnerable" resources that are at most risk of upset, and whether the project is consistent with the Port Risk Management Plan, emergency and evacuation plans, and other applicable regulations.

As discussed in Chapter 3.14, "Risk of Upset," all Port projects are subject to regulations for development and operation of the project facilities. Because these are requirements that have oversight by various agencies, the LAHD cannot avoid compliance with these regulations. These regulations must be adhered to during design, construction and throughout operation of the project.

A boat launch facility would not increase the probable frequency and severity of consequences to people or property from exposure to health hazards as a result of a potential accidental release or explosion of a hazardous substance. In several instances, the alternative sites are located next to an existing liquid bulk terminal or railway that provides transportation for these uses, which presents a certain risk of upset and threat to human health and safety. However, because users of the launch site would not be located onsite for extended periods of time, and because the liquid bulk facilities are sufficiently distanced from most sites to provide an adequate buffer in the event of a spill or other upset condition, impacts are generally considered less than significant.

Implementation of a boat launch at any of the alternative sites would not interfere with any emergency response plan or evacuation plan. A boat launch facility would not increase the risk of injury or death due to interference with any of these plans.

Alternative Site A (Berth 56)

The site does not contain any land uses that would pose a risk to public health and safety. The land uses surrounding the project site include commercial and non-hazardous industrial, warehousing for dry bulk goods, and liquid bulk terminals (which are located across a portion of the East Channel and Signal Street, to the southeast). The majority of the surrounding land uses would not result in any potential risk to human health and safety. However, the potential for risk of impacts associated with upset conditions and non-routine release from operations within the liquid bulk terminal could be caused by natural disasters, human error, and mechanical error.

Alternative Site B (SP Slip)

The site would be located adjacent to the Ports O' Call commercial center, parking lots, Harbor Boulevard, and the SP Slip, which contains docking areas for commercial fishing vessels. Activities associated with these land uses do not generally incorporate the use of materials that would be considered a hazard, or dangerous to human health and safety. Therefore, the risk of upset and dangers related to a spill of hazardous materials is minimal.

Alternative Site C (Berth 95 Area)

The site would be located adjacent to berthing areas used by the Catalina Express and associated parking facilities, and the docked United States Merchant Marine Vessel *Lane Victory;* it would be directly under the Vincent Thomas Bridge. Activities associated with these land uses do not generally incorporate the use of materials that would be considered a hazard, or dangerous to human health and safety. The only potentially foreseeable threat to human health and safety would result from a chemical or hazardous materials spill on the bridge above. The likelihood of this occurring would be considered remote. Therefore, the risk of upset and dangers related to a hazardous materials spill affecting human health and safety is minimal.

Alternative Site D (Berth 161 Area)

The site would be located adjacent to commercial, industrial, and liquid bulk land uses, and a boat repair facility. Activities associated with the commercial, industrial, and repair facility would not generally incorporate the use of materials that would be considered a hazard, or dangerous to human health and safety. However, the various liquid bulk tanks, which would be located south of the launch site and throughout "Mormon Island," would pose a risk to human health and safety. However, the likelihood of this occurring adjacent to the launch site is low. Therefore, impacts associated with the risk of upset and dangers related to a hazardous material spill affecting human health and safety would be considered less than significant.

Alternative Site E (Berth 183–184 Area)

The site is located in proximity to an existing petroleum product storage area (Wilmington Liquid Bulk [VOPAK]). Liquid bulk facilities exist approximately 200 yards north, across Water Street. Additionally, an existing rail yard and tracks that provide access to "Mormon Island" and the associated liquid bulk terminals are located adjacent to the site. Therefore, the risk of upset and threat to human health and safety is a site selection consideration, though not significant.

Alternative Site F (Berth 200 G-H)

The site would not be located adjacent to any significant land uses that incorporate the storage or use of hazardous materials. The site, however, would be located adjacent to railroad tracks that serve part of the Port. It is likely that some of these trains would carry petroleum products from liquid bulk tanks located within the Port. Because a chemical or hazardous materials spill is unlikely to occur within the vicinity of the launch site, impacts to human health and safety associated with the risk of upset are considered less than significant.

Alternative Site G (Berth 200Z Area)

The site would be located adjacent to vacant, unimproved land to the west, an existing marina to the south, a small marina to the northeast, and the confluence of the Consolidated Slip and East Basin to the north and northwest. Activities associated with the surrounding land uses generally consist of boating activities undertaken from the nearby marinas. There are no adjacent land uses that would result in a risk of upset of any hazardous materials. Impacts to human health and safety would not occur.

Alternative Site H (Berth 204 Colonial Boat Works)

The site would be located adjacent to an existing marina south, north, and west, and adjacent to a vacant, unimproved land to the east. Activities associated with the surrounding land uses generally consist of boating activities undertaken from the nearby marinas. There are not adjacent land uses that would result in a risk of upset of any hazardous materials. The site is located a significant distance from any railway that may transport hazardous materials. The risk to human health and safety would be considered negligible.

Alternative Site I (Berth 193–194 Area)

The site would be located on the site of an existing disposal site, adjacent to Yacht Street and in proximity to an existing petroleum product storage area (Wilmington Liquid Bulk [VOPAK]). Since an existing liquid bulk terminal and railway that provides transportation for these uses is located in the vicinity of the site. Therefore, the risk of upset and threat to human health and safety is a site selection consideration, though not significant.