

XV. ENVIRONMENTAL IMPACTS

The Ports of Los Angeles and Long Beach are located in Santa Monica Bay and San Pedro Bay. The ports and their associated approach areas support a high diversity of biological communities in both artificial and natural habitats. A primary goal of the LA/LB Harbor Safety Plan is reduce the chance of accidents that can also result in spills or other environmental damage. Through effective implementation of the Harbor Safety Plan, we can simultaneously increase personal and equipment safety and decrease environmental impacts.

Environmental Background: The port complex habitats can be simply divided into benthic (bottom) and kelp beds, salt marsh, water column, and bird and mammal habitat. The benthic hard substrate in POLA/LB is mostly artificial breakwaters and barriers of riprap (boulders and concrete rubble), and a constructed shallow water habitat in POLA. Kelp beds, capable of housing over 800 marine species, typically dominate the hard substrate with surfgrass habitat potentially existing in waters less than 10ft deep. The soft bottom substrate comprises the majority of acreage in POLA/LB and is home to a number of burrowing organisms and bottom-dwellers. The sandy intertidal habitat at Cabrillo Beach supports burrowing invertebrates, which provide food for shore birds at low tide and fish at high tide. Eelgrass beds are found in soft bottom substrate and are habitat for many invertebrates, fish, and birds. Wetland habitat is also vital for sustaining natural resources, and the constructed salt marsh near Cabrillo Beach is home to many bird species. The water column is also valuable habitat for many fish, larvae, and planktonic food webs in addition to seals and sea lions.

The most recent baseline survey of POLA/LB was completed in 2008 by SAIC.¹ SAIC's study is an inventory of the natural resources of the Los Angeles/Long Beach port areas and approaches. The purpose of the inventory is to provide factual information for consideration by members of the HSC regarding natural habitats and biota which may be impacted by implementing the provisions of the Harbor Safety Plan.

See, Appendix H for more detail on species and habitats found in POLA/LB.

Regulatory Background: There are many international, federal, state, regional, and local environmental regulations that apply to the POLA and POLB, these include: MARPOL, EPA, CARB, CCC, CWA, Port Authority, etc. In addition, both ports are committed to environmental protections. The Port of Long Beach implemented a "Green Port Policy" in January 2005 that serves as a guide for decision making and established a framework for environmentally friendly Port operations. The policy's five guiding principles are:

- Protect the community from harmful environmental impacts of Port operations.
- Distinguish the Port as a leader in environmental stewardship and compliance.
- Promote sustainability.
- Employ best available technology to avoid or reduce environmental impacts.
- Engage and educate the community.

¹ SAIC (Science Applications International Corporation). 2010. 2008 Biological Surveys of Los Angeles and Long Beach Harbors. Submitted to Port of Los Angeles Environmental Management Division.
http://www.portofla.org/environment/wildlife_habitat.asp

The **Port of Los Angeles'** Environmental Policy states that the Port is committed to managing resources and conducting Port developments and operations in both an environmentally and fiscally responsible manner. The Port will strive to improve the quality of life and minimize the impacts of its development and operations on the environment and surrounding communities through the continuous improvement of its environmental performance and the implementation of pollution prevention measures, in a feasible and cost effective manner that is consistent with the Port's overall mission and goals, as well as with those of its customers and the community.

See Appendix L for a more detailed description of laws and regulations on marine pollution

Air Pollution

North American Emission Control Area: On August 1, 2012, the North American Emission Control Area entered into effect after being approved by the International Maritime Organization. It requires the reduction of emissions of nitrogen oxides, sulfur oxides and particulate matter for ships within 200 nautical miles of the coasts of the United States and Canada through the burning of cleaner fuel and the installation of better air pollution control equipment on ships.

For more details on the ECA, see:

<http://www.epa.gov/oms/regs/nonroad/marine/ci/420f10015.pdf>

California Air Resources Board (CARB): The California Air Resources Board has issued their own regulations to control air pollution from ocean-going vessels in California ports. The regulations are aimed at reducing the emissions of particulate matter, nitrogen oxides, and sulfur oxides through the use of cleaner burning fuel.² These regulations apply in addition to the Emission Control Area requirements.

Water Pollution: As described, POLA and POLB support unique and diverse biological communities and habitats. Implementing the provisions in the various chapters of the Harbor Safety Plan may have environmental impacts.

Given the large amount of petroleum product that is transported through the POLA and POLB, one of the most significant environmental impacts to the area would be from a major oil spill within the port, near the approaches, or at one of the offshore marine oil terminals.

Oil and Fuel Spills: A major oil spill would cause significant environmental impacts, as well as impacts to area commerce, commercial and recreational fishing and boating, personal property, and human safety. Spilled oil, including certain clean-up operations, can cause impacts to the environment and other area resources. The Coast Guard has promulgated a Los Angeles/Long Beach Oil Spill Contingency Plan which would be in effect should a major oil spill incident occur.

² See, 13 C.C.R. § 2299.2 and 17 C.C.R. § 93118.2.

For the Contingency Plan in its entirety, see:

<https://www.wildlife.ca.gov/OSPR/Preparedness/LA-LB-Spill-Contingency-Plan>

Other Ship Pollution: Harbor area waters are also subject to the Environmental Protection Agency (“EPA”) vessel discharge rules and regulations. The centerpiece of the EPA’s National Pollutant Discharge Elimination System (NPDES) vessels program is the nationwide Vessel General Permit (“VGP”) which applies to discharges incidental to the normal operation of all non-recreational, nonmilitary vessels of 79 feet or greater in length which discharge into ocean or shoreline waters.³ The VGP contains effluent limits for different types of discharges including ballast water, deck runoff, bilge water, gray water, and cooling sea water. The VGP’s requirements overlap with existing laws and regulations.⁴

A detailed discussion of vessel discharge rules and regulations can be found at:

http://www.portoflosangeles.org/DOC/WRAP_Vessel_Discharge_Rules.pdf

Bunkering/Lighting: Both the federal government and the State of California have enacted regulations governing the transfer of oil and other hazardous materials and vessel operations.

See Appendix M for more information on Bunkering Best Practices.

Ballast Water: Invasive species are potential threats to the Ports and the surrounding marine environment and local economy. Invasive species are transported primarily through the ballast water of commercial shipping. In order to combat this threat, California has created an Aquatic Invasive Species Management Plan of which mariners should be aware.⁵ In addition, the SLC, Marine Facilities Division regulates ballast water management for the state.⁶ Ships are required to maintain a ballast water management plan and log ballast water intake and discharge.

For more info please see Page 29 of the POLB and POLA Discharge Rules and Regulations:

http://www.portoflosangeles.org/DOC/WRAP_Vessel_Discharge_Rules.pdf

Marine Mammal Strikes: Marine mammal strikes is an issue in the approaches to the Ports. During their migratory seasons, large numbers of whales pass near the approaches to the Ports. To avoid strikes, mariners need to be aware of the migratory season and any NOAA alerts regarding marine mammals as well as all Coast Guard issued Local Notices to Mariners.

³ The EPA has issued a new draft version of the VGP expected to come into effect on December 18, 2013 to replace the current VGP. The EPA has also issued a separate VGP applicable to smaller vessels which do not fall within the parameters of the VGP. See, http://www.epa.gov/npdes/pubs/vgp_briefsheet2011.pdf for more details.

⁴ Local regulations include Port of Long Beach Tariff No. 4 and Port of Los Angeles Tariff No. 4. State laws and regulations include the SLC regulations, the California Clean Coast Act of 2005, and California Department of Fish and Wildlife Code 5650. International Regulations include the International Convention for the Prevention of Marine Pollution from Ships (“MARPOL”), which, among other things, specifies methods of oily ballast and bilge water containment and prohibits the discharge of untreated sewage.

⁵ See, <https://www.wildlife.ca.gov/Conservation/Invasives/Plan>

⁶ See, http://www.slc.ca.gov/spec_pub/mfd/ballast_water/Documents/BWMngmnt_InfoSheet.pdf for more details.

For a detailed map highlighting the whale advisory zone:

http://channelislands.noaa.gov/images/whaleadvisoryzone_1g.jpg

Dredging: Dredging can cause environmental impacts to the marine environment as it reduces water clarity which can lead to a reduction of oxygen available in the water for aquatic organisms as well as stirring up the sea bed which can contain pollutants. Dredging activities should be careful if the area being dredged is existing eelgrass habitat.

***In the United States, **eelgrass** habitat is protected by federal and state law under their respective Clean Water Acts; the Magnuson-Stevens Fishery Conservation and Management Act; the California Coastal Act; and Title 14, California Code of Regulations. According to these laws and regulations, any activities which may potentially impact eelgrass habitat must mitigate for those impacts. This requires mitigation for harmful impacts to existing eelgrass beds as well as potential eelgrass habitat.

Stormwater Runoff: Urban runoff is a major environmental issue in Los Angeles County, including at the LA/LB Ports. Runoff from upstream sources combines with runoff from Port industrial operations, resulting in water quality standards violations in adjacent waterways, including the Los Angeles River and the Pacific Ocean. Currently there are official limits for metals, bacteria, and nutrients (TMDLs, or Total Maximum Daily Limits) that are being exceeded for numerous water bodies that flow into the Ports.

Please see Appendix L for more detail.

Conclusion: The Harbor Safety Plan increases navigational safety throughout POLA and POLB, thereby reducing the likelihood of a maritime incident, such as a major oil spill. Moreover, the LA/LB Harbor Safety Committee is made up of qualified representatives from the maritime community, port authorities, pilots, tug operators, petroleum and shipping industries, recreational boaters, and a multitude of federal, state and local agencies that meet regularly to develop additional strategies to further safe navigation and oil spill prevention. As such, implementing the provisions of the HSP has a beneficial impact on the environment because it furthers navigational safety and oil spill prevention and response, thereby helping protect the LA/LB area from adverse environmental impacts.