Introduction

The Port of Los Angeles (POLA) and Port of Long Beach (POLB) Water Resources Action Plan (WRAP) represents a collaborative effort by the two ports to address water and sediment quality issues within their respective port districts. The WRAP was adopted by both ports in August of 2009. The ports’ stated goals for the WRAP are (1) to support the attainment of full beneficial uses of harbor waters and sediments by addressing the impacts of past, present, and future port operations, and (2) to prevent port operations from degrading existing water and sediment quality.

WRAP Development, Review, and Adoption

The ports developed the WRAP with the guidance and participation of the Environmental Protection Agency (EPA), the Los Angeles Regional Water Quality Control Board (LA-RWQCB), and the WRAP Plan Advisory Committee (PAC), which is a public stakeholder group composed of regulatory agencies, non-governmental organizations, and community representatives. Throughout the process, the input of the stakeholders was solicited, evaluated, and incorporated into the WRAP; information on the WRAP and its development, including the PAC meeting minutes, is available on each of the two ports’ websites (www.portoflosangeles.org; www.polb.com).

Annual Progress Reports

The WRAP is a living document in the sense that the ports may update and modify it as circumstances warrant. Periodic review of the WRAP by the ports will determine the need for updates. Updates could be warranted by regulatory changes such as issuance of TMDLs and/or substantially modified NPDES permits, by technological advances in pollution control, or by the addition of new control measures. Rather than produce annual updates to the WRAP, the ports identified that annual progress reports, identifying the progress of the various control measures, would be developed and presented to each port’s Board of Harbor Commissioners (Board), with document updates occurring on an as-needed basis only.

The first two progress reports were completed and released in October 2010 and October 2011. The reports focused on each individual control measure and included a summary and status update for each port. Milestones for each control measure were noted, including the current status of each control measure and future plans. The 2010 and 2011 progress reports are available on each port’s website (http://www.polb.com/environment/water_quality/wrap.asp and http://www.portoflosangeles.org/environment/wrap.asp).
Permitting and Regulatory Update

Total Maximum Daily Loads

As discussed in section 2.4.5 of the WRAP, specific water bodies within each port’s jurisdiction are identified as impaired for several pollutants on the 303(d) list of impaired water bodies. Since 2005, the ports have supported LA-RWQCB and EPA on the development of the TMDL for Toxic Pollutants in the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters (TMDL) by collecting and providing significant amounts of data, reviewing work product, and providing technical input and resources. The TMDL was approved by the LA-RWQCB and the EPA in early 2012, and became effective on March 23, 2012. Both ports are actively gathering additional data and beginning to identify programs and policies to implement as part of the TMDL. Key activities include coordination with other responsible parties on required monitoring plans, development and implementation of special studies to address data gaps and clarify TMDL compliance options (in anticipation of the TMDL reopener in 2018), and collaboration with the State Water Resources Control Board (State Water Board), the LA-RWQCB, and the Southern California Coastal Water Resources Project (SCCWRP) on the Statewide Sediment Quality Objectives (SQO) Part 2 – Indirect Effects strategy for assessing the impacts of Port sediments on fish tissue bioaccumulation.

NPDES Permits

Along with TMDLs, the ports must comply with NPDES permits that cover stormwater discharges from both industrial and construction-related activities in the ports. The LA-RWQCB held a preliminary meeting with each port to discuss potential permitting structures. Both ports have been independently moving forward with implementation and compliance for the construction NPDES permit, which has been in effect since September 2009. Similarly, both ports are continuing to implement their respective stormwater programs for the industrial and municipal NPDES permits. The POLB continues to actively implement its existing Master Stormwater Program, which has been in effect since 1992, and includes regular inspections and follow up with port facilities to ensure compliance with the industrial stormwater permit, annual training and coordinated stormwater outfall sampling and reporting. As part of the POLA Tenant Outreach Program, annual facility stormwater permit inspections have been ongoing since 2009.

The third draft of the 2012 NPDES Industrial General Permit was released for public review on July 18, 2012. Both ports reviewed the draft and provided comments to the State Water Board in September 2012. This draft permit, if finalized, will replace General Permit Order 97-03-DWQ which currently covers stormwater discharges for general industrial facilities.

The POLB will explore alternative permitting scenarios with the LA-RWQCB, such as a Port-specific section under the Long Beach MS4 Permit, which will incorporate POLB’s Master Storm Water Program and the TMDL to create a more straightforward and comprehensive regulatory scenario. POLA, in conjunction with the City of Los
Angeles (LA) Watershed Protection Division, is an active stakeholder in the development of the new Los Angeles County-wide MS4 permit, which is currently out for public review. The recently approved Harbor Toxics TMDL has been incorporated into this permit. POLA will be working with the City of Los Angeles and local municipalities to put MS4 programs in place to ensure compliance.

Control Measure Update

The WRAP identified fourteen (14) control measures aimed at fulfilling each port’s water resources mission and a Technology Advancement Program to evaluate and demonstrate new technologies that may enhance the protection and improvement of water and sediment quality in the harbor complex. Four basic types of sources are addressed by the WRAP through existing and proposed control measures: land use discharges, on-water discharges, sediments, and watershed discharges. Over the last 3 years port staff has been actively developing, updating, and implementing various programs and policies directly related to individual WRAP measures. The following highlight the major milestones met by the ports over the last year. For a detailed description of each control measure, see the WRAP document on each port’s website: (http://www.polb.com/environment/water_quality/wrap.asp and http://www.portoflosangeles.org/environment/wrap.asp).

Port of Long Beach

Litter Control Program – The POLB has begun the implementation phase of its Litter Control Program in 2012. Elements of the program are as follows:

- An education and outreach campaign has been developed which employs a “local heroes” theme developed by the POLB Communication Division to further foster a sense of pride of ownership in the stakeholders of the harbor and its unique working environment. The campaign features photos of actual port truckers, laborers, and terminal workers with anti-litter testimonials from these featured workers (see Figure 1). Promotional materials have been placed on banners and trash cans in areas where litter generation is high.

Figure 1 – Port of Long Beach Local Hero Banner
• Anti-Litter Signs (see Figure 2) have been placed in high litter generating areas to remind port patrons that littering is illegal in the Port of Long Beach and violations can result in fines.

![Figure 2 – Anti-Litter Signs](image)

• Automatic Retractable Screens (see Figure 3) have been tested through the WRAP TAP and are scheduled to be installed in all curb-inlet type catch basins throughout the Harbor District. They prevent trash and debris from entering the storm drain infrastructure, and being transported into the harbor.

![Figure 3 – Automatic Retractable Screen Installed in the Port of Long Beach](image)

• Covered trash cans with recycling options and advertising panels carrying the outreach campaign message have been distributed to container terminal facilities at the Port of Long Beach (see Figure 4).
Vessel Guidance Manual – The Vessel Discharge Rules and Regulations guidance manual was updated in May 2012 to reflect new hull cleaning, vessel maintenance, and sewage discharge requirements. The POLB simultaneously updated tariff items relating to ballast water, bilge, refuse, and oil as well as establishing new tariff items for on-water vessel maintenance and land-based vehicle and equipment maintenance. The updated document is available on the ports’ websites.

Sediment Management Plans – In December 2011 the POLB released its Sediment Management Handbook for Dredge and Fill Projects. The handbook was developed to guide POLB staff through evaluation and selection of the most appropriate management alternative for contaminated and uncontaminated sediments generated during POLB dredging and fill projects.

Technology Advancement Program - In support of the POLB’s Litter Control Program, a number of WRAP TAP projects are currently being tested.

- Five solar powered trash compacting receptacles (see Figure 5) are currently being tested in the port and are being considered for expanded use throughout the Harbor District by the Port Maintenance Division. The receptacles use the sun’s energy to automatically compact trash at the point of disposal, increasing capacity by 5 times within the same footprint as ordinary receptacles. Increased capacity reduces collection trips and can cut related fuel use and emissions and cut labor costs.
A Marina Trash Skimmer (see Figure 6) is currently being tested through the WRAP TAP for widespread use in the port. The skimmer attaches to a dock, partially submerged, collects floating marine debris, consolidates it, and holds it until the unit is emptied. In addition to collecting trash and debris, the skimmer has been shown to improve the water quality in the habitat around the skimmer. By removing the trash and decomposing floating organic material it allows for light to penetrate the water column, circulates the low flushing areas, and vastly improves water clarity and quality. The skimmers can also be fitted with a disposable bilge absorbent pad to absorb oil sheen waste for proper disposal. With installation of these units, marine debris can be easily removed before it can sink or float out into the bay and offshore areas.

Figure 6 – Marina Trash Skimmer
Port of Los Angeles

Housekeeping and Structural BMPs – POLA identified funds to improve water and sediment quality at Wilmington marinas through implementation of housekeeping and structural best management practices. POLA has compiled a list of potential items that could be purchased and provided to marinas for installation/use. These items include:

- Marina trash skimmers
- Hydrosweepers/parking lot sweeper
- Sewage pumpout stations
- Encapsulated foam

POLA is currently eliciting input from marina managers and will purchase items by spring 2013.

As part of its ongoing Tenant Outreach Program, POLA conducts annual site visits to tenant facilities to evaluate stormwater permit compliance. During 2012 site visits POLA began using an electronic method of recording tenant outreach, which allows for greater efficiency and reduces paper use. During the latest site visits, POLA staff has provided tenants with information regarding the new MS4 and Industrial General Permit revisions, hazardous waste storage compliance, and assistance in meeting the requirements of AB 341 pertaining to mandatory commercial recycling.

Litter Control Program – POLA has installed seven solar-powered trash compactor trash cans in the San Pedro area: two at the Fanfare at San Pedro Gateway fountain, one at Liberty Hill Plaza, three at 22nd St Park, and one at the corner of 22nd Street and Via Cabrillo Way. The trash compactor trash cans not only increase the amount of trash that can be collected, five-fold over traditional receptacles of the same size, but the design secures trash within and eliminates dispersion of trash by animals.

POLA has also identified funds to provide a marina trash skimmer to three of its recreational marinas. These trash skimmers are attached to marina docks and use readily available dockside power to run a whisper-quiet pump that draws in and contains trash and debris. Oil absorbent pads fitted within the skimmer also remove oil sheen that might be present. The skimmer captures trash that might otherwise flow through the marina to other areas of the port, while also reducing the time needed by marina staff to remove trash from marina water and riprap. The pump also increases water circulation, which can reduce scum and algal build up and improves water quality. Skimmers are expected to be purchased and in place by the end of 2012.

Also as part of their litter control program, POLA staff have identified high litter generating areas throughout the port and plan to do outreach as well as place signage and additional trash receptacles in these areas, to increase awareness of port tenants and others operating in the port area.
**Vessel Guidance Manual** – The *Vessel Discharge Rules and Regulations* guidance manual was updated in May 2012 to reflect new hull cleaning, vessel maintenance, and sewage discharge requirements. The updated document is available on the ports’ websites.

**Piling Replacement Policy & Standards** – POLA has been implementing its previously established policy and standards and has evaluated a number of pile wrap alternatives that might reduce or eliminate the need to use treated timber piles. Two test wraps have been selected through this evaluation process, and will be tested both on fender piles of active wharfs and on piles that will be placed in a test pile farm. The test pile farm will allow piles and pile wraps to be tested in the water for many years without worry of breakage from vessels using an active wharf. The location of the farm has been identified and wrapped piles are expected to be driven by the spring of 2013.

**Sediment Management Plan** – POLA established an internal Dredge Committee, with representatives from the environmental management, engineering, and construction divisions. The port’s *Sediment Management Guidance* document is currently being finalized.

**Next Steps**

Port staff has determined that a formal update of the WRAP document is not necessary at this time. We anticipate reevaluating the WRAP control measures once TMDL implementation programs are more fully developed and new MS4 and Industrial permits are in place at both ports. As control measures continue to be developed and implemented, staff of the two ports will report to their Boards on progress, recommended actions, and report on any other relevant information. Annual progress reports will continue to be provided to stakeholders and the Boards.