AGENDA

1. Introductions
2. Summary of September 17 meeting
3. Key Issues
4. Next Steps
5. Comments/Questions
INTRODUCTION

The Ports of Long Beach and Los Angeles (Ports) have developed the attached summary tables to give the Plan Advisory Committee (PAC) some background on the types of sources and activities that have the potential to occur in the harbors, and the programs that the Ports already have in place to address many of the sources. **Tables 1 and 2 should not be considered as the classification of a source or pollutant as an actual issue.** The Ports are providing this broad list of potential sources and pollutants as a starting point for further examination and discussion. The Ports expect the input of the PAC to establish the key issues for the Water Resources Action Plan (WRAP) and to provide guidance on priorities among those issues.

There are two tables, one dealing with water quality issues and the other with issues of sediment contamination. The water quality table is the most complex, and the following material may help explain the rationale behind its organization.

**TABLE 1 – WATER QUALITY ISSUES**

There are three basic categories of sources that Table 1 considers:

- **Landside Uses and Sources:** These are potential discharges from the land uses in the harbors, such as cargo and passenger terminals, port-related industrial facilities; related activities such as equipment and facility maintenance; non-industrial uses such as shops and restaurants, fishing piers, beaches, and marinas; and roads and rail lines.
- **On-Water Uses and Sources:** These are discharges directly to the water from various sources on or in the water. Potential sources may include, vessels discharges, corrosion and leaching from bottom paint, pilings and structures and accidental leaks and spills directly to the water.
- **Watershed Issues and Sources:** Watershed discharges originate outside the harbors (and beyond the jurisdiction of the Ports), and are conveyed into the harbors by streams, such as the Dominguez Channel and the Los Angeles River, by storm drains that drain areas outside the harbors and discharge into the harbors, and by the ocean. Aerial deposition is also considered in this category.

It is important to recognize how Table 1 is organized. In general, within each of these categories the table describes types of activities, rather than the more obvious approach of focusing on categories of land uses such as terminals, or cargo vessels, or oil operations. **A given land use could have several sources; accordingly, it is important not to search the table for a given use, but rather to consider the various sources within a use and search for those in the table.** For example, a container terminal could include vehicle/equipment maintenance, grounds/facility maintenance, parking lots, container cargo storage/handling areas, rail facilities, on-water discharges from vessels, on-water fueling, and contaminant leaching. An oilfield operation could include vehicle/equipment maintenance, grounds/facility maintenance, parking lots, and liquid bulk transfer and storage facilities.

**Landside Uses and Sources**

Within the Landside category there are four groupings of sources/activities.
• **Port-Wide Sources:** This category includes activities that are common to a wide variety of landside uses or tenant categories. Vehicle/equipment maintenance and roads/parking lots are examples of port-wide sources that occur in many different areas.

• **Cargo-Handling Areas:** Recognizing that a large portion of port land use is cargo handling, this category addresses the portion of tenant facilities given over to the cargo itself. Three different types of cargo-handling areas are included in this category: contained or packaged cargo, liquid bulk, and dry bulk.

• **Other Non-Public Facilities:** Other areas of the Ports that do not serve the public are addressed in this category. This includes commercial fishing facilities, utilities and government facilities, rail, and various light industries.

• **Visitor-Serving Areas:** This includes restaurants, public fishing piers and boat launch areas. Areas such as parks and beaches are addressed in the Grounds and Facility Maintenance category under Port-wide Sources.

**On-Water Uses and Sources**
This section of the table represents potential sources of contamination that are in or on the water, with no opportunity to shift activity landside; for example, various discharges from vessels, leaching of contaminants into water, and on-water fueling. Generally speaking, on-water activities apply to both commercial and recreational vessels, the exception being ballast water. Note that the issue of invasive species brought in on hulls and in ballast water is not included in the WRAP because it is a biological, rather than water quality, issue being addressed through other Port, local, state, and federal programs.

**Watershed Issues and Sources**
The four sources presented in this draft version of the table reflect the Ports’ current view of the interactions between the harbor and surrounding land and water areas. The level of detail is general, which reflects the very limited role the Ports have in controlling inputs at a watershed level.

**TABLE 2 -- SEDIMENT ISSUES**
Sediment issues are fundamentally different from the water quality issues in Table 1, and the organization of Table 2 reflects that fact. The Ports suggest that they face two basic sediment issues: legacy contamination, which is defined as contamination caused by sources or activities that are no longer occurring, and current contamination, which is contamination resulting from processes that are still active.
Table 1 - Water Resources Action Plan – Sources, Contaminants, and Issues for Water Quality

<table>
<thead>
<tr>
<th>Source Category</th>
<th>Potential Source Activity/Key Issues</th>
<th>Potential Contaminants of Concern</th>
<th>Existing Port Initiatives/Regulation</th>
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<tbody>
<tr>
<td>LANDSIDE USES AND POTENTIAL SOURCES</td>
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<td>PORT-WIDE SOURCES</td>
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</tbody>
</table>
| Land Use – Port-Wide Sources | Vehicle & Equipment Maintenance and Landside Fueling  
- Maintenance areas in terminals, other tenant facilities, and POLA/POLB maintenance yards  
- Land-based mobile fueling  
- Non-stormwater discharges from vehicle washdown  
- Outdoor storage of materials | Metals  
- Organic compounds (PAHs, oil & grease)  
- TSS | Tenant Outreach  
- POLB Stormwater Program  
- MS4 Permit Program (POLA)  
- General Industrial Permit Program (POLA) |
| | Grounds and Facility Maintenance  
- Landscape, building exteriors, and miscellaneous structures in terminals and other leased areas  
- Vacant/unleased areas and natural areas  
- Parks, beaches, promenades, marinas, research facilities, aquaculture, other uses  
- Road and other ROW landscaping  
- Storage and use of maintenance products | Nutrients  
- Pesticides/ herbicides  
- TSS  
- Organic compounds  
- Residuals/solids (trash, animal waste)  
- Metals  
- Pathogens | Tenant Outreach  
- POLB Master Stormwater Program  
- POLB Port Wide Stormwater and Dust Control Program  
- General Industrial Permit Program (POLA)  
- MS4 Permit Program (POLA)  
- Cabrillo Beach Water Quality Improvement Study  
- Waterfront Development Design  
- Bacteria TMDL |
| Land Use – Port-Wide Sources | Roads and Parking Lots  
- Designated parking areas in tenant facilities (longshore, staff, visitor)  
- Vehicle wastes  
- Spillage | Metals  
- Residuals/solids (trash)  
- TSS  
- Nutrients  
- Organic compounds (PAHs, oil & grease) | Trash Management  
- MS4 Permit Programs  
- POLB Master Stormwater Program  
- Sweeping Program |
<table>
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<tr>
<th>Source Category</th>
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</tr>
</thead>
</table>
| **Land Use – Port-Wide Sources** | Construction Sites  
- Erosion and dust  
- Outdoor Storage of Materials  
- Outdoor Equipment Operations  
- On-site fueling | TSS  
Metals  
Residuals/solids (trash)  
Organic compounds (PAHs, oil & grease) | POLB Master Stormwater Program  
Construction Activities NPDES Permit Program (POLA) |
| **CARGO-HANDLING AREAS** | Container/Breakbulk/Neobulk Cargo Storage  
- Packaged cargo, including autos  
- Paved areas for storage of cargo and use of cargo-handling equipment | Metals  
Residuals/solids (trash)  
TSS  
Nutrients  
Organic Compounds (PAHs, oil & grease) | Tenant Outreach  
POLA ECA  
POLB Master Stormwater Program  
NPDES Industrial Permits (POLA) |
| **Land Use – Cargo Terminals** | Liquid Bulk Transfer and Storage Facilities  
- Transfer, handling, and storage of petroleum, other fuels and petroleum-based products, chemicals, rocket fuels, and other oils and liquids  
- Stationary fuel storage in tenant areas and maintenance facilities | Organic Compounds (PAHs, oil & grease)  
Metals | Tenant Outreach  
POLA ECA  
POLB Master Stormwater Program  
NPDES Industrial Permits (POLA) |
| **Land Use – Cargo Terminals** | Dry Bulk Transfer and Storage Facilities  
- Transfer and storage of dry bulk products (coke, sulfur, salt, gypsum, cement, recycled metals)  
- Uncovered storage  
- Leakage of product during transfer and leaching from uncontained product | Metals  
TSS  
Oil & grease  
Other (product components) | Tenant Outreach  
POLA ECA  
POLB Master Stormwater Program  
NPDES Industrial Permits (POLA) |
| **OTHER NON-PUBLIC FACILITIES** | Commercial Fish Market/Fish Processing Facilities  
- Packing, canning, and marketing facilities  
- Landside support areas (e.g., outside net storage)  
- High-organic wastes | Pathogens  
Nutrients  
Organic Compounds (PAH, oil & grease)  
Trash and other solids | Tenant Outreach  
Bacteria TMDL Program (POLA)  
POLA ECA |
<table>
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<th>Source Category</th>
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<th>Existing Port Initiatives/Regulation</th>
</tr>
</thead>
</table>
| Land Use – Other Non-Public Facilities | Government Agency Facilities  
- Sewage treatment plants (TITP), generating stations, fire stations, federal and state government facilities  
- Non-stormwater discharges  
- Waste handling & disposal  
- Outdoor storage (liquids and materials) | - TSS  
- Residuals/solids (trash)  
- Metals  
- Organic compounds (PAHs, oil & grease) | - POLB Master Stormwater Program  
- MS4 Permit Programs |
| Land Use -- Rail                      | Rail Facilities  
- Locomotive and railcar maintenance, ROW maintenance  
- Non-stormwater discharges  
- Outdoor loading & unloading  
- Outdoor storage of liquids and materials  
- Waste handling & disposal  
- Herbicide/pesticide use | - Metals  
- Residuals/solids (trash)  
- TSS  
- Nutrients  
- Organic compounds (PAHs, oil & grease)  
- Other (herbicides/pesticides) | - Tenant Outreach  
- POLB Stormwater Program  
- NPDES Industrial Permits (POLA) |
| Land Use – Other Non-Public Facilities | Auto Repair/Dismantling & Boat Repair  
- Non-stormwater discharges  
- Outdoor liquid container storage  
- Outdoor storage of materials  
- Waste handling & disposal  
- Herbicide/pesticide use | - Metals  
- TSS  
- Nutrients  
- Organic compounds (PAHs, oil & grease) | - Tenant Outreach  
- WPD Critical Source Inspections (POLA)  
- POLB Master Stormwater Program |
| VISITOR-SERVING SOURCES               | Restaurants  
- Drains and washdown practices  
- Outdoor storage of greases and oils  
- Solid waste handling (e.g., dumpster mgmt) | - Residuals/solids (trash)  
- Pathogens  
- Metals  
- Other (oil & grease, surfactants) | - Tenant Outreach  
- POLB Master Stormwater Program  
- WPD Critical Source Inspections (POLA)  
- Bacteria TMDL Program (POLA POC only) |
| Land Use – Visitor Serving            | Boat Launch Areas  
- Administered by cities/county  
- Boat washdown  
- Public activities | - Pathogens  
- Organic compounds (PAHs, oil & grease)  
- TSS  
- Residuals/solids (trash, debris)  
- Other (surfactants) | - Tenant Outreach  
- WPD Critical Source Inspections (POLA)  
- Bacteria TMDL Program (POLA POC only) |
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<th>Source Category</th>
<th>Potential Source Activity/Key Issues</th>
<th>Potential Contaminants of Concern</th>
<th>Existing Port Initiatives/Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On-water</strong></td>
<td>Discharges From Vessels</td>
<td>Pathogens</td>
<td>POLA Clean Marina Program</td>
</tr>
<tr>
<td></td>
<td>- Commercial and recreational vessels</td>
<td>Metals</td>
<td>(recreational vessels)</td>
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<tr>
<td></td>
<td>- Black water (sewage)</td>
<td>Nutrients and BOD</td>
<td>POLA Shipboard Ballast Water</td>
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<td>- Grey water (showers, sinks, laundry, kitchen)</td>
<td>Residuals/solids (trash and debris)</td>
<td>Treatment Pilot Study (commercial vessels)</td>
</tr>
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<td></td>
<td>- Bilge water and ballast water</td>
<td>Other (odors, particulates, marine sanitation device treatment chemicals)</td>
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<td>- Accidental releases (spills)</td>
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<td>- Jettisoning of solids</td>
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<tr>
<td><strong>On-water</strong></td>
<td>On-Water Vessel Maintenance</td>
<td>Organic compounds (PAHs, solvents, paint, varnish, oil &amp; grease)</td>
<td>POLA Clean Marina Program</td>
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<tr>
<td></td>
<td>- Commercial and recreational vessel maintenance while underway or at anchor</td>
<td>Metals (batteries, sanding grit)</td>
<td>(recreational vessels)</td>
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<tr>
<td></td>
<td>- Sanding, painting, mechanical repairs</td>
<td>Other (surfactants)</td>
<td></td>
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<tr>
<td><strong>On-Water</strong></td>
<td>Fuel Docks/On-Water Fueling</td>
<td>Organic Compounds (volatiles, semi-volatiles, PAHs, oil &amp; grease)</td>
<td>Tenant Outreach</td>
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<td></td>
<td>- Fuel transfer over water</td>
<td>Residuals/solids (trash)</td>
<td>WPD Critical Source Inspections (POLA)</td>
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<td></td>
<td>- Commercial and recreational vessels</td>
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<td>- Non-stormwater discharges</td>
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<td>- Accidental releases</td>
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<tr>
<td><strong>On-water</strong></td>
<td>Contaminant Leaching</td>
<td>Metals (esp. copper, zinc, arsenic)</td>
<td>POLA Clean Marina Program</td>
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<td></td>
<td>- Bottom paints</td>
<td>Organic compounds (PAHs, TBT)</td>
<td>(recreational vessels)</td>
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<td></td>
<td>- Anodes</td>
<td>Residuals/solid debris (wood, hardware, plastic wrap, foam)</td>
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<td>- Pilings</td>
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<td><strong>On-water</strong></td>
<td>Wastes from Fishing</td>
<td>Pathogens</td>
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<td></td>
<td>- Commercial, recreational, and bait barges</td>
<td>Other (nutrients, BOD)</td>
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<td>- Washdown, discards while underway</td>
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<tr>
<td><strong>On-water</strong></td>
<td>Derelict/Abandoned Vessels and Wrecks</td>
<td>Organic compounds (PCBs)</td>
<td>POLA Clean Marina Program</td>
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<tr>
<td></td>
<td>- POLA issue</td>
<td>Metals (anodes and paints)</td>
<td>(recreational vessels)</td>
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<td>Other (oil, grease, paints, solvents, other hazardous wastes, batteries)</td>
<td>Seaplane Lagoon Sunken Vessel Removal Program</td>
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<td>Responsible Marina Program</td>
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<tr>
<td>Watershed</td>
<td>Stormwater Runoff</td>
<td>Residuals/solids (trash), Pathogens, Nutrients, Metals, Organic compounds, Pesticides/herbicides, Pharmaceuticals</td>
<td>Inner Cabrillo Beach Improvements, Participation in EPA/RWQCB effort to evaluate bacteria in harbor waters, Dominguez Channel and Los Angeles/Long Beach Harbor Watershed TMDLs, Dominguez Watershed Advisory Committee</td>
</tr>
<tr>
<td>Watershed</td>
<td>Dry Weather Runoff</td>
<td>Residuals/solids (trash), Pathogens, Nutrients, Metals, Organic compounds, Pesticides/herbicides, Pharmaceuticals</td>
<td>Water/Sediment Quality Database Development, Dominguez Watershed Advisory Committee</td>
</tr>
<tr>
<td>Watershed</td>
<td>San Pedro Bay/Ocean Inputs</td>
<td>Residuals/solids (trash), Pathogens, Nutrients, Metals, Organic compounds, Pesticides/herbicides, Pharmaceuticals</td>
<td>Bight ‘08 Participation, Dominguez Channel and Los Angeles/Long Beach Harbor Watershed TMDLs</td>
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<tr>
<td>Watershed</td>
<td>Aerial Deposition</td>
<td>Nutrients, Organics, Metals</td>
<td>San Pedro Bay Ports Clean Air Action Plan</td>
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Table 2  Water Resources Action Plan – Potential Sources, Contaminants, and Issues for Sediment

<table>
<thead>
<tr>
<th>Category</th>
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<tbody>
<tr>
<td>Sediment</td>
<td>Legacy Contamination</td>
<td>- Metals</td>
<td>- Special studies: Biological Baseline, sediment characterization studies</td>
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<td>- Pesticides</td>
<td>- Remediation/mitigation projects: treated sediments, capping projects</td>
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<td></td>
<td>- PCBs</td>
<td>- Removal programs: construction and maintenance dredging</td>
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<td>- PAHs</td>
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<td>- Organotins (TBT)</td>
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<tr>
<td>Sediment</td>
<td>Current Contamination</td>
<td>- Metals</td>
<td>- Special studies: modeling, sediment characterization studies</td>
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<td>- Pesticides</td>
<td>- Removal programs: construction and maintenance dredging</td>
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<td>- PCBs</td>
<td>- Sustainability management plan</td>
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<td>- PAHs</td>
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<td>- Organotins (TBT)</td>
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ACRONYMS

BOD  Biological Oxygen Demand
DO   Dissolved Oxygen
ECA  POLA Environmental Compliance Audit
EPA  Environmental Protection Agency
IMO  International Maritime Organization
MS4  Municipal Separate Storm Sewer System
NPDES National Pollutant Discharge Elimination System (Clean Water Act Permit)
OSPR Office of Spill Prevention and Response

PAHs  Polycyclic Aromatic Hydrocarbons
PCBs  PolyChlorinated Biphenyls
POC  Ports O’ Call
POLA Port of Los Angeles
POLB Port of Long Beach
POTW Publicly-Owned Treatment Works
ROW Right of Way
RWQCB Regional Water Quality Control Board

SLC  State Lands Commission
TBT  TriButyl Tin
TITP Terminal Island Treatment Plant
TMDL Total Maximum Daily Load
TSS Total Suspended Solids
WPD Watershed Protection Division