

Appendix 4.5-9  
*Port SUSMP*

PORT OF SAN DIEGO  
JURISDICTIONAL  
STANDARD URBAN STORMWATER MITIGATION PLANNING DOCUMENT

March 2008



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## 1.1 Background

The municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit (Order No. R9-2007-0001, NPDES No. CAS0108758, hereinafter referred to as “Municipal Permit”) issued to San Diego County, the Port of San Diego (Port), San Diego County Regional Airport Authority and 18 cities (Copermittees) by the San Diego Regional Water Quality Control Board (Regional Board) on January 24, 2007, requires the development and implementation of a program addressing urban runoff pollution issues in development planning for public and private projects.

The requirement to implement a program for development planning is based on federal and state statutes including: Section 402 (p) of the Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (“CZARA”), and the California Water Code. The Clean Water Act amendments of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the NPDES program. The Municipal Permit requires the implementation of a Jurisdictional Urban Runoff Management Program (URMP). The primary objectives of the Jurisdictional URMP requirements are to:

1. Ensure that discharges from municipal urban runoff conveyance systems do not cause or contribute to a violation of water quality standards;
2. Effectively prohibit non-stormwater discharges in urban runoff; and
3. Reduce the discharge of pollutants from urban runoff conveyance systems to the Maximum Extent Practicable (MEP statutory standard).

One component of the Port’s Jurisdictional URMP is to prepare and implement a Jurisdictional Standard Urban Stormwater Mitigation Plan (SUSMP). As required by the Municipal Permit, the Copermittees jointly developed a Model SUSMP as the basis for jurisdictional plans. The Port Jurisdictional SUSMP (Port SUSMP) is based on the Model SUSMP and tailored to Port specific conditions and requirements. The Model SUSMP is referenced throughout this document and can be found at [www.waterboards.ca.gov/sandiego/programs/sd\\_stormwater.html](http://www.waterboards.ca.gov/sandiego/programs/sd_stormwater.html).

## 1.2 Summary

The Port SUSMP has been developed by the Port to address post-construction urban runoff pollution from new development and redevelopment projects that fall under “priority project” categories. The goal of the Port SUSMP is to develop and implement practicable policies to

ensure to the maximum extent practicable that development does not increase pollutant loads from a project site and considers urban runoff flow rates, velocities and durations. This goal may be achieved through site-specific controls and/or drainage area-based or shared structural treatment controls. The Port SUSMP was developed to meet the requirements of the Model SUSMP, collectively developed by the Copermittees, approved by the Regional Board on June 12, 2002, and revised October 31, 2007.

Under the Port SUSMP, the Port will approve the SUSMP project plan(s) as part of the development plan approval process for discretionary projects, and prior to issuing permits for ministerial projects. To allow flexibility in meeting Port SUSMP design standards, structural treatment control BMPs may be located on- or off-site, used singly or in combination, or shared by multiple developments, provided certain conditions are met.

All new development and significant redevelopment projects that fall into one of the following “priority project” categories are subject to Port SUSMP requirements, subject to the lawful prior approval provisions of the Municipal Permit. In the instance where a project feature, such as a parking lot, falls into a priority project category, the entire project footprint is subject to Port SUSMP requirements. These categories are:

- Commercial development greater than 1 acre
- Heavy industry development greater than 1 acre
- Automotive repair shops
- Restaurants
- Projects located within or directly adjacent to or directly discharging to receiving waters within Environmentally Sensitive Areas that create 2,500 square feet or more of impervious surface or increase the area of imperviousness to 10% or more of its naturally occurring condition
- Parking Lots 5,000 square feet or more of impervious surface or with  $\geq 15$  parking spaces and potentially exposed to urban runoff
- Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater
- Retail gasoline outlets 5,000 square feet or more or with a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

Note that San Diego Bay is an Environmentally Sensitive Area. Further information is provided in Section 1.3 “Definitions” and Section 1.5 “Implementation Process.” It should also be noted that the following project priority categories identified in the Municipal Permit and Model SUSMP do not apply to Port projects: residential developments of 10 units or more and hillside development greater than 5,000 square feet. These categories have been eliminated from the implementation and BMP selection process in this document. Also note that for the purpose of implementing Port

SUSMP requirements, all projects within the Port are considered “commercial” projects, unless a project meets the definition of “auto repair shop,” “restaurants,” “parking lot,” or “streets or roads.”

**Limited Exclusion:** Trenching and resurfacing work associated with utility projects are not considered priority projects; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; maintenance of shoreline protection structures; and routine replacement of damaged pavement, such as pothole repair. Parking lots, buildings and other structures associated with utility projects are subject to SUSMP requirements if one or more of the criteria for the above categories are met. See the Definition for "Significant Redevelopment" for further clarification.

## 1.3 Definitions

The definitions provided in this section are based on those provided in the Model SUSMP. Some definitions have been enhanced to clarify applicability to Port tidelands. Other definitions have been removed because they do not apply to projects within the Port’s jurisdiction.

“Automotive Repair Shop” means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. Information regarding these SIC codes is provided in Appendix C.

“Commercial Development” means any development that is not exclusively heavy industrial. The category includes, but is not limited to: mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses, hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, automotive dealerships, commercial airfields, and other light industrial complexes. In regards to SUSMP priority project categories, most development or redevelopment in the Port tidelands is considered “commercial,” unless the project is exclusively a “restaurant,” “auto repair shop,” “parking lot,” or “street or road.”

“Commercial Development greater than 1 acre” means any commercial development that results in the disturbance of one acre or more of land.

“Directly Connected Impervious Area (DCIA)” means the area covered by a building, impermeable pavement, and/ or other impervious surfaces, which drains directly into the storm drain without first flowing across permeable vegetated land area (e.g., lawns).

“Environmentally Sensitive Areas” means areas that include, but are not limited to, all Clean Water Act 303(d) impaired water bodies (“303[d] water bodies”); areas designated as an “Area of Special Biological Significance” (ASBS) by the State Water Resources Control Board (SWRCB) (*Water*

*Quality Control Plan for the San Diego Basin* (1994) and amendments); water bodies designated as having a RARE beneficial use by the SWRCB (*Water Quality Control Plan for the San Diego Basin* (1994) and amendments), or areas designated as preserves or their equivalent under the Multiple Species Conservation Program (MSCP) within the Cities and County of San Diego. The limits of ASBS are those defined in the *Water Quality Control Plan for the San Diego Basin* (1994 and amendments). Environmentally sensitive area is defined for the purposes of implementing SUSMP requirements, and does not replace or supplement other environmental resource-based terms. It should be noted that the SWRCB has designated San Diego Bay, in its entirety, as having a RARE beneficial use in the San Diego Basin Plan

“Hillside” means lands that have a natural gradient of 25 percent (4 feet of horizontal distance for every 1 foot of vertical distance) or greater and a minimum elevation differential of 50 feet, or a natural gradient of 200 percent (1 foot of horizontal distance for every 2 feet of vertical distance) or greater and a minimum elevation differential of 10 feet.

“Hydromodification” means the change in the natural watershed hydrologic processes and runoff characteristics (i.e. interception, infiltration, overland flow, interflow and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and changes in sediment transport. In addition, alteration of stream and river channels, installation of dams and water impoundments, and excessive streambank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

“Infiltration” means the downward entry of water into the surface of the soil.

“Low Impact Development (LID)” means a stormwater management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions.

“Maximum Extent Practicable (MEP)” means the technology-based standard established by Congress in the Clean Water Act 402(p)(3)(B)(iii) that municipal dischargers of urban runoff must meet. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional lines of defense).

“Natural Drainage” means a natural swale or topographic depression which gathers and/or conveys runoff to a permanent or intermittent watercourse or waterbody.

“New Development” means land disturbing activities on a previously undeveloped parcel of land; surface grading for structural development, including construction or installation of a building or structure, the creation of impervious surfaces; and land subdivision.

“Parking Lot” means land area or facility for the temporary parking or storage of motor vehicles used personally, or for business or commerce.

“Projects Discharging to Receiving Waters within Environmentally Sensitive Areas” means all development and significant redevelopment that would create 2,500 square feet of impervious surfaces or increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition, and either discharge urban runoff to a receiving water within or directly adjacent (where any portion of the project footprint is located within 200 feet of the environmentally sensitive area) to an environmentally sensitive area, or discharge to a receiving water within an environmentally sensitive area without mixing with flows from adjacent lands (where the project footprint is located more than 200 feet from the environmentally sensitive area).

“Project Footprint” means the limits of all grading and ground disturbance, including landscaping, associated with a project.

“Receiving Waters” means surface bodies of water, which directly or indirectly receive discharges from urban runoff conveyance systems, including naturally occurring wetlands, streams (perennial, intermittent, and ephemeral (exhibiting bed, bank, and ordinary high water mark), creeks, rivers, reservoirs, lakes, lagoons, estuaries, harbors, bays and the Pacific Ocean. The Port shall determine the definition for wetlands and the limits thereof for the purposes of this definition, which shall be as protective as the Federal definition utilized by the United States Army Corps of Engineers and the United States Environmental Protection Agency. Constructed wetlands are not considered wetlands under this definition, unless the wetlands were constructed as mitigation for habitat loss or are BMPs originally constructed in receiving waters.

Construction of treatment control BMPs is prohibited in “Receiving Waters” may not be used to satisfy SUSMP requirements.

“Restaurant” means a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. See Appendix C for information on this SIC code. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirement and hydromodification requirement.

“Sediment” means soil, sand, and minerals washed from land into water. Sediment resulting from anthropogenic sources (i.e. human induced land disturbance activities) is considered a pollutant. This SUSMP regulates only the discharges of sediment from anthropogenic sources and does not regulate naturally occurring sources of sediment. Sediment can destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

“Significant Redevelopment” means development that would create, add or replace at least 5,000 square feet of impervious surfaces on an already developed site that falls under a priority

development project category. Where redevelopment results in an increase of less than 50% of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria identified in Section 2.3, Step 8 apply only to the addition, and not to the entire development. When redevelopment results in an increase of more than 50% of the impervious surfaces of a previously existing development, the numeric sizing criteria applies to the entire development. Significant redevelopment includes, but is not limited to: the expansion of a building footprint; addition to or replacement of a structure; replacement of an impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Significant redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots; new sidewalk construction, pedestrian ramps, or bikelane on existing roads; and replacement of damaged pavement.

“Site Design BMP”, a significant part of Low Impact Development (LID), means any project design feature that reduces the amount of impervious surfaces, disconnects impervious surfaces, reduces creation or severity of potential pollutant sources and/or reduces the alteration of the project site’s natural flow regime. Redevelopment projects that are undertaken to remove pollutant sources or to reduce the need for new roads and other impervious surfaces (as compared to conventional or low-density new development) by incorporating higher densities and/or mixed land uses into the project design, are also considered site design BMPs.

“Source Control BMP (both structural and non-structural)” means land use or site planning practices, or structures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff. Examples include roof structures over trash or material storage areas, and berms around fuel dispensing areas.

“Stormwater BMP” means any schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, structural treatment BMPs, and other management practices to prevent or reduce to the maximum extent practicable the discharge of pollutants directly or indirectly to receiving waters. Stormwater BMPs also include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. This SUSMP groups stormwater BMPs into the following categories: site design, source control, and treatment control (pollutant removal) BMPs.

“Stormwater Conveyance System” also known as “municipal separate storm sewer system,” “MS4,” or “storm drain system” means private and public drainage facilities by which stormwater

may be conveyed to Receiving Waters, such as: natural drainages, ditches, roads, streets, constructed channels, aqueducts, storm drains, pipes, street gutters, or catch basins.

“Streets, Roads, Highways, and Freeways” means any project that is not part of a routine maintenance activity, and would create a new paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles and other vehicles. For the purposes of SUSMP requirements, Streets, Roads, Highways and Freeways do not include trenching and resurfacing associated with utility work; applying asphalt overlay to existing pavement; new sidewalk, pedestrian ramps, or bikelane construction on existing roads; and replacement of damaged pavement.

“Treatment Control (Structural) BMP” means any engineered system designed and constructed to remove pollutants from urban runoff. Pollutant removal is achieved by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

## 1.4 Conflicts with Local Practices or Municipal Permit

The Model SUSMP contains provisions related to any conflicts between SUSMP requirements and established local codes. The Port knows of no apparent conflicts between Model SUSMP requirements and established Port codes or ordinances. If an apparent conflict is identified by a project proponent, it should be brought to the attention of the Port Project Architect for tenant projects or the Port Environmental Services Department for capital projects.

## 1.5 Implementation Process

As described in the Port Jurisdictional URMP Document, the Port is a special government entity, created in 1962 by the California legislation under the “San Diego Unified Port District Act.” The Act defines the Port as a public corporation with the responsibility of managing San Diego Harbor and administering approximately 5500 acres of public lands along San Diego Bay. The Port has the authority to protect, preserve, and enhance physical access, natural resources and quality of water in the bay. Approximately 176 tenants and 277 subtenants operate businesses on lands leased from the Port. In addition, the Port operates its own “municipal” facilities including the Tenth Avenue Marine Terminal, the National City Marine Terminal, the Cruise Ship Terminal, various parks and recreational facilities, and other municipal operations facilities.

Article 10 of the Port Code is entitled “Stormwater Management and Discharge Control Ordinance.” A copy of Article 10 of the Port Code is available at [www.portofsandiego.org/sandiego\\_environment/documents/CODE-STORMWATER-WEB.doc](http://www.portofsandiego.org/sandiego_environment/documents/CODE-STORMWATER-WEB.doc).

Section 10.08.(a) 3 address New Development and Redevelopment and states that “the Executive Director may establish controls on the volume and rate of stormwater runoff from new developments and redevelopments as may be reasonably necessary to minimize the discharge and transport of pollutants. The Port SUSMP Document represents one mechanism by which the Executive Director has established such controls in order to comply with the Municipal Permit.

New development and significant redevelopment projects are conducted by two major categories of project proponents, tenants of the Port (hereafter referred to as “tenant projects”) and the Port District itself (hereafter referred to as “capital projects”). The Port has different project approval processes for tenant and capital projects and accordingly has slightly different approval processes for Port SUSMP project review and approval. The Port SUSMP project approval process, including roles and responsibilities of Port departments, is described below for both tenant and capital projects.

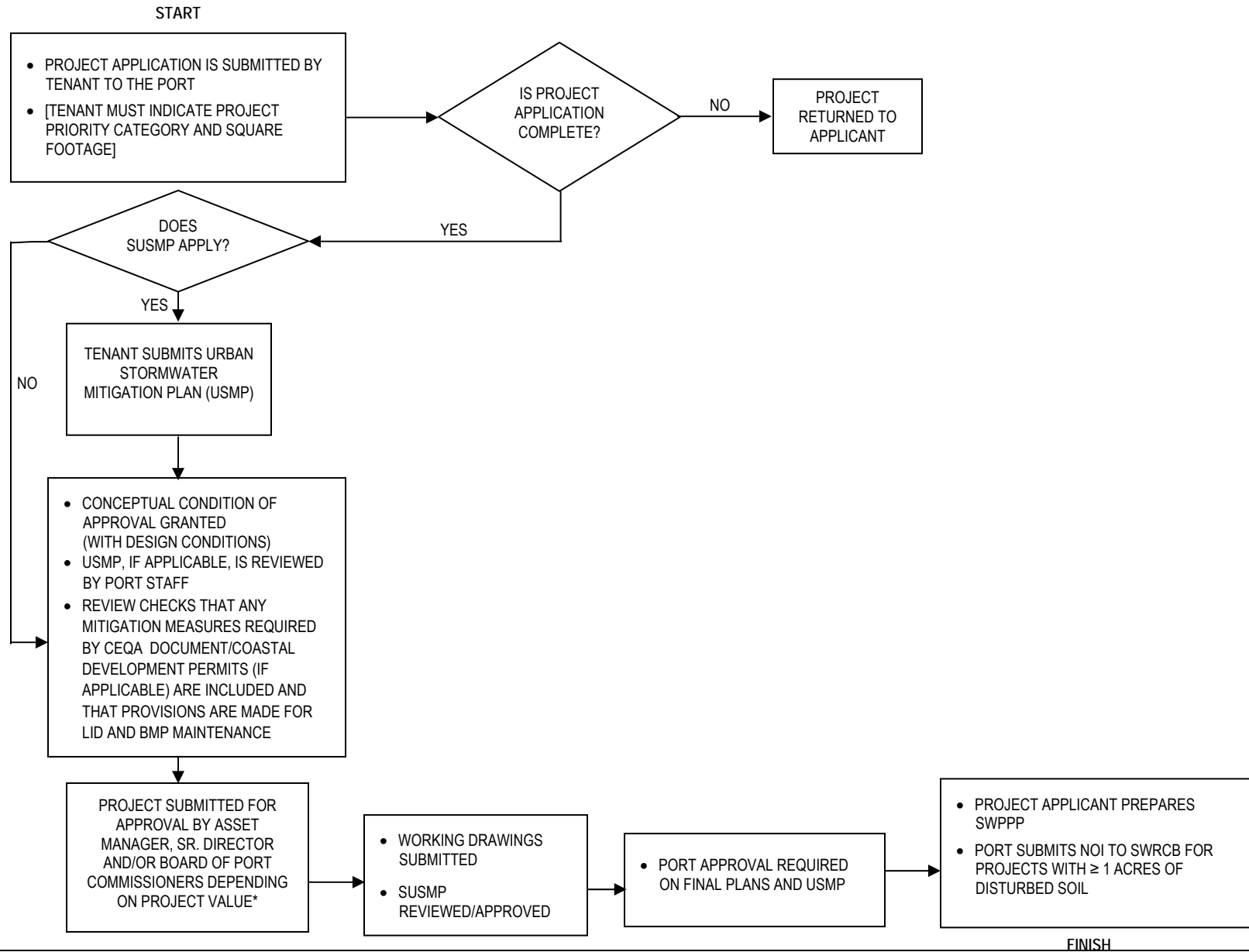
#### A) TENANT PROJECTS

Port tenants desiring surface or subsurface improvements or to perform new construction, reconstruction, modification, or demolition, must submit a request for approval. Project approval typically involves several steps and review by several Port departments. The process is outlined in the flow chart in Figure 1-1 and is further described below.

Project approval starts with the project proponent submitting a project description to the Port, where a project completeness check is conducted. The first step in SUSMP compliance for tenant projects is that all projects must indicate the Project SUSMP Priority Category and the project square footage with the project request. Completed projects are then logged and assigned a project architect, while a Notification of Plan is submitted. The Port then determines whether SUSMP requirements apply to the project. Guidelines are provided in Table 1-1 to assist project proponents in determining whether SUSMP requirements apply to projects conducted within the Port jurisdiction. If SUSMP requirements apply, the project proponent must submit an Urban Stormwater Mitigation Plan (USMP) describing how the project will meet SUSMP requirements for the project application to be considered complete. The Port also determines if an Environmental Review is needed. The Port will perform a CEQA and Coastal Development Permit determination if necessary. The appropriate Port staff coordinates a technical review and approval of the project including obtaining review from other Port Departments. The Port reviews and approves all USMP documents and final design plans to ensure that SUSMP requirements are met. The tenant may be required to revise plans throughout the process if deemed necessary by the Port. Upon submittal of the final working drawings, an approval letter will be granted by the Port. The project is submitted for approval by asset manager, Senior Director and/or Board of Port Commissioners depending on project value. The project proponent then prepares a SWPPP. The Port submits an NOI to SWRCB for projects with greater or equal to 1 acres of disturbed soil.

The approval of a Port tenant project becomes part of the lease or part of a use permit. For discretionary projects, any mitigation measures required by the environmental review process, such as implementation and maintenance of stormwater BMPs, become part of the lease or use permit and are adopted by the Executive Officer or the Board of Port Commissioners as a Mitigation Monitoring and Reporting Program.

**Figure 1-1. Port Tenant Plan Processing and Project Approval**



**Table 1-1 Applicability of SUSMP Requirements by Project Type – Port of San Diego**

Project Type	Reference in Model SUSMP	Do SUSMP Requirements Apply? (Yes/No)
<b>Projects Considered Priority Projects and Required to Comply with SUSMP Requirements:</b>		
<b>1) Commercial Development:</b>		
a. Any project located within 200 feet of San Diego Bay and creates 2,500 square feet or more of impervious surfaces or increases the area of imperviousness of a project site to 10% or more of its naturally occurring condition.	1	Yes
b. Any project located greater than 200 feet from San Diego Bay that discharges urban runoff directly to San Diego Bay or directly adjacent (where any portion of the project footprint is located within 200 feet of the San Diego Bay) without mixing with flows from adjacent lands and creates 2,500 square feet or more of impervious surfaces or increases the area of imperviousness of a project site to 10% or more of its naturally occurring condition.	1	Yes
c. Other Redevelopment Projects that create, add or replace at least 5,000 square feet of impervious surfaces on an already developed site that fall under a priority development project categories, including, but not limited to: the expansion of a building footprint; addition to or replacement of a structure; replacement of an impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Replacement of impervious surfaces includes any activity where impervious material(s) are removed, exposing underlying soils during construction.	2	Yes
d. Any commercial development project with a footprint greater than 1 acre.	3	Yes
e. Redevelopment projects that result in an increase of less than 50% of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria identified in Section 2.3, Step 8 apply only to the addition, and not to the entire development. When redevelopment results in an increase of more than 50% of the impervious surfaces of a previously existing development, the numeric sizing criteria applies to the entire development	2	Yes
<b>2) Automotive Repair Shop</b> of any size. See definition of “Automotive Repair Shop.”	3	Yes
<b>3) Restaurants</b> of any size. See definition of “Restaurant.”	3	Yes
<b>4) Parking Lots</b> more than 5,000 square feet or more with 15 or more parking spaces, and potentially exposed to urban runoff.	3	Yes
<b>5) Streets or Roads</b> with a project footprint of 5,000 square feet or greater.	3	Yes
<b>6) Heavy Industry</b> greater than one acre. This category includes, but is not limited to, manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, boat, etc.)	3	Yes
<b>7) Retail gasoline outlets (RGOs)</b> 5,000 square feet or more or with a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.	3	Yes
<b>Project Types Not Considered Priority Projects and Exempted from SUSMP Requirements:</b>		
<ul style="list-style-type: none"> <li>▪ Any trenching and resurfacing associated with utility work</li> <li>▪ Any resurfacing and reconfiguring of surface parking lots</li> <li>▪ Application of asphalt overlay to existing pavement</li> <li>▪ New sidewalk or pedestrian ramp construction</li> <li>▪ Construction of bike-lanes on existing roads</li> </ul>	2, 3, 4	No
<ul style="list-style-type: none"> <li>▪ Replacement of damaged pavement or impervious surfaces as part of routine maintenance activities.</li> </ul>	2, 4	No

Project Type	Reference in Model SUSMP	Do SUSMP Requirements Apply? (Yes/No)
<ul style="list-style-type: none"> <li>▪ Projects (except mandatory categories above) that create less than 2,500 square feet of impervious surfaces or do not increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition.</li> </ul>	1	No
<p>Notes for References to Model SUSMP:</p> <ol style="list-style-type: none"> <li>1. Definition of “Projects Discharging to Receiving Waters within Environmentally Sensitive Areas”</li> <li>2. Definition of “Significant Redevelopment”</li> <li>3. Model SUSMP Part II Summary</li> <li>4. Definition of “Streets, Roads, Highways, and Freeways”</li> </ol>		

**B) CAPITAL PROJECTS**

Capital projects are evaluated, designed, and approved in accordance with the same environmental and coastal development permitting standards that are applied any development in the Port tidelands. The approval of development and improvement projects carried out by the Port itself includes the environmental mitigation measures that are self-imposed as a result of the environmental review process. Such mitigation measures become part of the project design and/or implementation and are formalized as an adopted Mitigation Monitoring and Reporting Program. The process for implementing SUSMP requirements for capital projects is outlined in the flow chart in Figure 1-2 and is further described below.

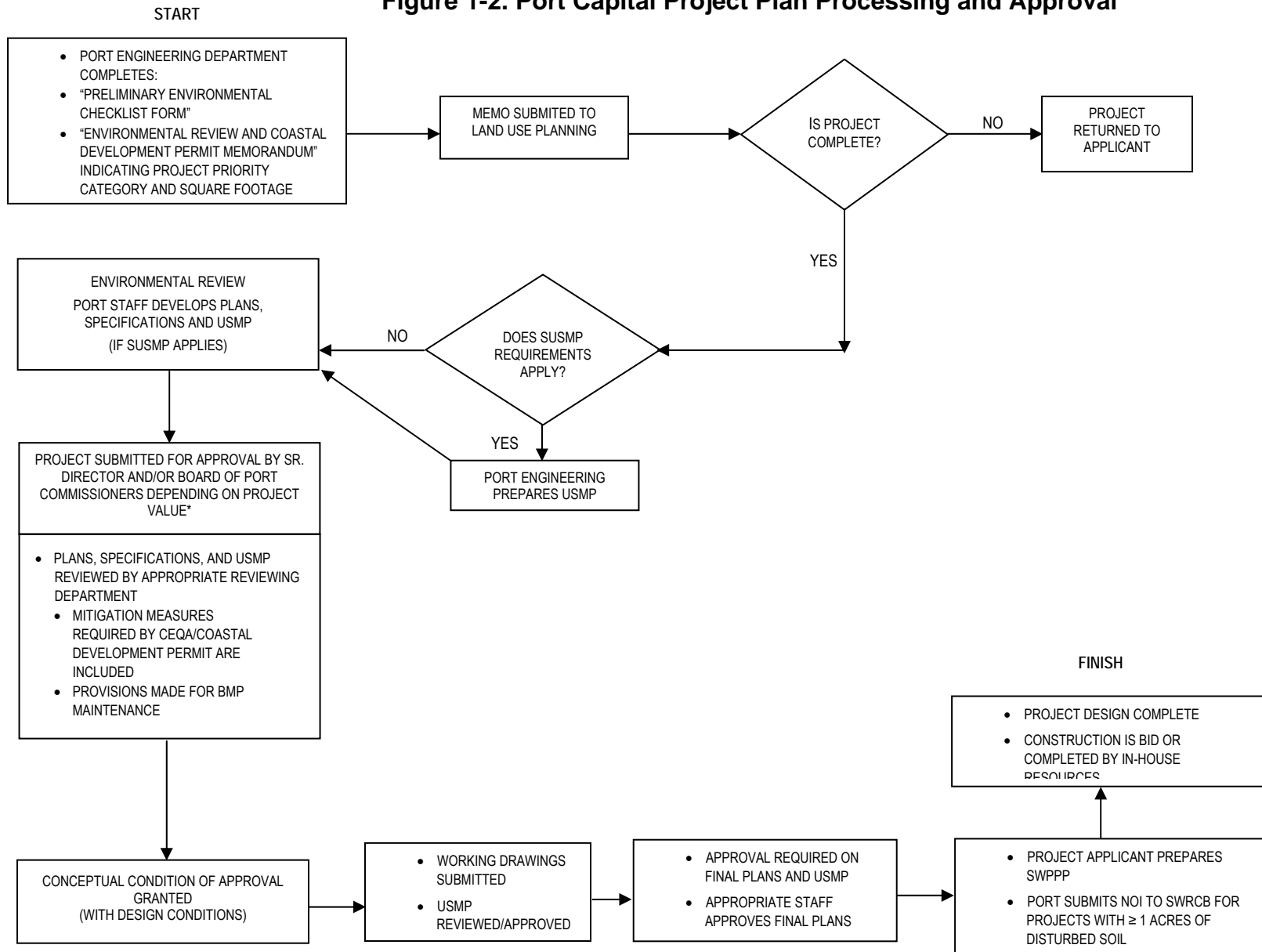
All development projects in the Port’s tidelands undergo an environmental review as part of the coastal development permit process. Port staff initiates the review process by completing a “Preliminary Environmental Checklist Form.” The checklist is then submitted under cover of an Environmental Review and Coastal Development Permit Memorandum for environmental review. The memorandum must include the designated SUSMP project priority category and square footage. Projects are evaluated for environmental impacts and the imposition of mitigation measures to eliminate or minimize any impacts. Port Staff determines if Coastal Development Permit or CEQA requirements apply.

The appropriate Port department evaluates whether SUSMP requirements apply during this stage, using general guidelines provided in Table 1-1.

If SUSMP requirements apply, the Port advises the project proponent that an USMP describing how the project will meet SUSMP requirements must be submitted prior to final construction plan approval. At this stage, project environmental mitigation measures are developed and the project is forwarded for coastal development permit approval. Once a coastal development permit is approved, the Port prepares plans, specifications, and the USMP document. The Port reviews and approves the USMP document and final design plans to ensure that SUSMP requirements are met. Any mitigation measures required by the environmental review process, such as

implementation and maintenance of stormwater BMPs, become part of the coastal development permit and are adopted by the Board of Port Commissioners as a Mitigation Monitoring and Reporting Program. This process ensures that SUSMP requirements are incorporated into the project design and shown on the plans prior to bidding for construction contracts or completion of construction work by Port staff.

Figure 1-2. Port Capital Project Plan Processing and Approval



## Departmental Responsibilities

The general responsibilities of those departments involved in the implementation of the Port SUSMP process are listed in Table 1-2. The responsibilities of the Port departments involved in the planning and/or review and/or approval of SUSMP requirements for tenant and capital projects is outlined in subsections A) and B) above. The inspectors of the Construction Support Department ensure that structural BMPs installed according to approved plans. General Services Department staff are involved with the operation and proper maintenance of BMPs installed for capital projects.

**Table 1-2 Departmental Responsibilities for SUSMP Implementation**

	Real Estate Division  (including Architecture and Mapping Services)	Land-Use Planning Department	Environmental Services Department	Facilities & Engineering Division	Construction Support	General Services
Education	X		X	X		
Tenant Project Review	X	X	X			
Tenant Project Approval	X	X	X			
Capital Project Planning		X	#	X		
Capital Project Review		X	X	X		
Capital Project Approval		X	X	X		
Construction Inspection			#	#	X	
Capital Project Operations and Maintenance			#			X
Enforcement	#		X		X	

X – Primary responsibility

# – Secondary responsibility



## Section 2

## Stormwater BMP Selection Procedure

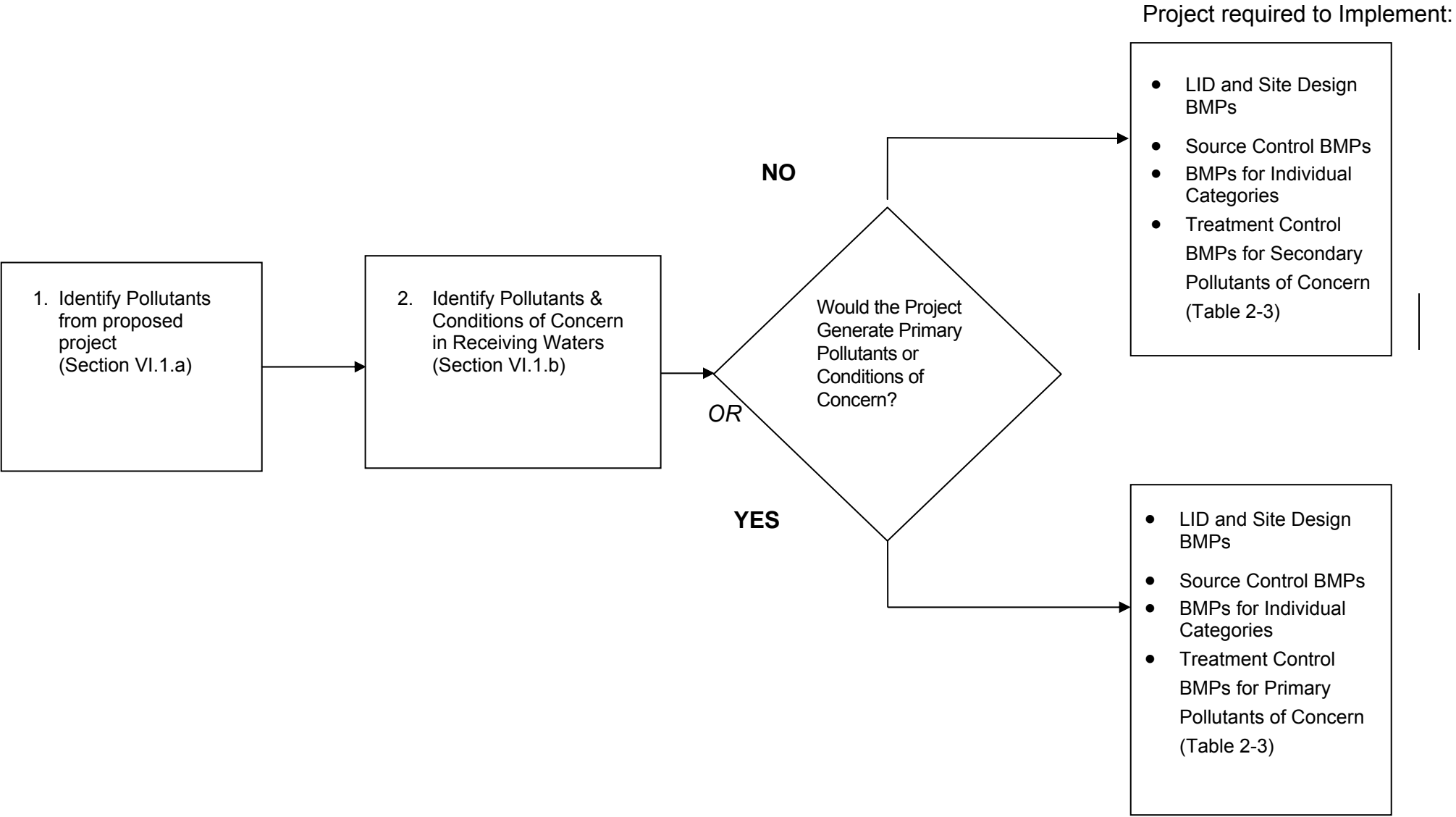
Section 2 provides a procedure for identifying a project's pollutants and conditions of concern, and addressing these through site design, source control, and treatment control stormwater BMPs. All priority projects shall implement one or a combination of stormwater BMPs, including, 1) LID and site design BMPs, 2) source control BMPs and, 3) structural treatment BMPs after the pollutants and conditions of concern have been identified. Stormwater BMPs, from those listed in Appendix A: "Approved Stormwater Best Management Practices", shall be considered and implemented where expressly required by the Permit and if not so required where determined applicable and feasible by the Port. Additional Information on BMPs is included in the notes to Table 2-8 and in Appendix B. It is recommended that the U.S. Environmental Protection Agency's "Preliminary Data Summary of Urban Runoff Best Management Practices" (August 1999, EPA-821-R-99-012) be used as a guide. The stormwater BMPs shall adhere to the requirements in Section 2 of this Jurisdictional SUSMP, and shall be correctly designed so as to remove pollutants to the maximum extent practicable. A flow chart summarizing the stormwater BMP selection procedure is provided in Figure 2-1.

### 2.1 Urban Stormwater Mitigation Plan

In order to ensure that SUSMP requirements are integrated into all applicable projects, project proponents are required to prepare an USMP for all Priority Projects. The Port requires that all USMPs be prepared by a licensed civil engineer, registered in California. USMPs are required for both tenant projects and capital projects and should be submitted to the Port. The required components of an USMP are identified in this Section and shown in Table 2-1. Further detail is provided in Section 2.2 - Identify Pollutants and Conditions of Concern; Section 2.3 - Establish Stormwater BMPs; and Section 2.4 – Proof of Ongoing Stormwater BMP Maintenance. It should be noted that the project proponent must comply with all applicable requirements in Sections 2.2, 2.3, and 2.4 and not rely solely on the outline of USMP requirements provided in this Section.

In general, the USMP must clearly convey the process used to identify pollutants of concern, conditions of concern and BMPs selected for the project as well as identifying BMP maintenance requirements. The requirements for a Port USMP are similar to "Water Quality Technical Report" requirements established by the City and County of San Diego. The fundamental steps in implementing SUSMP requirements and completing the USMP are as follows:

Figure 2-1 Stormwater BMP Selection Procedure Flow Chart



**Table 2-1 Required Components of an Urban Stormwater Mitigation Plan (USMP)  
 for Priority Projects**

Preparation	<ul style="list-style-type: none"> <li>▪ Prepared by CA Registered Civil Engineer</li> </ul>
Organization & Content	<ul style="list-style-type: none"> <li>▪ Table of Contents</li> <li>▪ Vicinity map</li> <li>▪ Project Description</li> <li>▪ Narrative of Project Activities</li> </ul>
Site Map	<ul style="list-style-type: none"> <li>▪ Entire property included on one map (use key map if multi-sheets)</li> <li>▪ Drainage areas and direction of flow</li> <li>▪ Private storm drain system(s)</li> <li>▪ Nearby water bodies and municipal storm drain inlets</li> <li>▪ Location of stormwater conveyance systems (ditches, inlets, storm drains, etc.)</li> <li>▪ Location of existing and proposed stormwater controls</li> <li>▪ location of “impervious” areas-paved areas, buildings, covered areas</li> <li>▪ Locations where materials would be directly exposed to stormwater</li> <li>▪ Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)</li> <li>▪ Areas of potential soil erosion (including areas downstream of project.</li> </ul>
Pollutants and Conditions of Concern	<ul style="list-style-type: none"> <li>▪ Pollutants based upon land use</li> <li>▪ Project located in which Watershed</li> <li>▪ Impaired water bodies downstream of the project and impairment</li> <li>▪ Drainage and Study</li> <li>▪ Impacts to hydrologic regime (hydromodification evaluation)</li> </ul>
Types of BMPS	<p><i>LID and Site Design BMPs</i></p> <ul style="list-style-type: none"> <li>▪ Reduce impervious surfaces</li> <li>▪ Conserve natural areas</li> <li>▪ Minimize directly connected areas</li> <li>▪ Protect slopes and channels</li> <li>▪ Minimize soil compaction (in natural or landscaped areas)</li> <li>▪ Minimize disturbances to natural drainages</li> <li>▪ Direct flows from impervious areas into pervious areas prior to discharging to the MS4</li> </ul> <p><i>Source Control BMPs</i></p> <ul style="list-style-type: none"> <li>▪ Inlet stenciling and signage</li> <li>▪ materials Storage</li> <li>▪ Trash Storage</li> <li>▪ Efficient irrigation</li> <li>▪ Other controls (as applicable)</li> </ul> <p><i>Structural Treatment BMPs</i></p> <ul style="list-style-type: none"> <li>▪ Basis for selection (include targeted pollutants, justification, and alternative analysis)</li> <li>▪ Design criteria (include calculations)</li> <li>▪ Pollutant removal information (other than vendor specifications)</li> <li>▪ Literature references</li> <li>▪ Maintenance Condition(s)</li> </ul>
BMP Maintenance	<ul style="list-style-type: none"> <li>▪ O&amp;M Plan</li> <li>▪ Access Agreement</li> </ul>

A) IDENTIFY ANTICIPATED PROJECT POLLUTANTS.

Refer to Table 2-2 to select pollutants of concern associated with the project type (i.e., Commercial Projects, Automotive Repair Shops, Restaurants, Parking Lots, Streets or Roads). Descriptions of general categories of water pollution are provided in Table 2-3. Identification of project pollutants must comply with Section 2.2 of this SUSMP.

B) IDENTIFY PRIMARY AND SECONDARY POLLUTANTS OF CONCERN

Step 1. Identify receiving water. Receiving waters for the Port are San Diego Bay or the Pacific Ocean. RWQCB Region 9 Basin Plan Hydrologic Units that apply to the Port jurisdiction are: Pueblo San Diego (908), Sweetwater (909), and Otay (910).

Step 2. Compare the specific location where the project discharges to the receiving water (Step 1) to the most recent Clean Water Act 303(d) list of impaired water bodies. The 303(d) list can be found at [http://www.swrcb.ca.gov/tmdl/303d\\_lists.html](http://www.swrcb.ca.gov/tmdl/303d_lists.html). Refer to listings for Region 9. The Port anticipates preparing a figure to illustrate jurisdictional boundaries and the areas of 303(d) list impairment that apply to Port receiving waters to assist in identifying primary pollutants of concern. When available, this document will be posted at [www.portofsandiego.org/sandiego\\_environment/storm\\_water.asp](http://www.portofsandiego.org/sandiego_environment/storm_water.asp).

Step 3. Compare “Anticipated Project Pollutants” from Section 2.1 A) above to pollutants for which the receiving water at or near the point of project discharge is impaired (Step 2). Any anticipated project pollutants that are also identified by the 303(d) list for the project discharge location are “Primary Pollutants of Concern.” All other anticipated project pollutants are “Secondary Pollutants of Concern.”

C) IDENTIFY CONDITIONS OF CONCERN

The project proponent must prepare a drainage study that evaluates impacts to the site hydrologic regime. Specific requirements of the drainage study are presented in Section 2.2. In general, the drainage study must identify conditions of concern by identifying overall watershed characteristics, include a field reconnaissance of downstream areas that are susceptible to erosion or habitat impacts from altered flow regimes, and include an analysis of rainfall runoff characteristics and propose BMPs to mitigate downstream impacts.

**Table 2-2 Pollutants of Concern for Priority Project Categories**

Priority Project Category	Anticipated Pollutants of Concern	Other Potential Pollutants of Concern (1)
Commercial Projects Meeting Criteria 1)a., 1)b., 1)c., or 1)d. in Table 1-1.	Trash & Debris Oil & Grease	Sediments Nutrients Organic Compounds Oxygen Demanding Substances Bacteria & Viruses Pesticides
Automotive Repair Shops	Heavy Metals Organic Compounds (including petroleum hydrocarbons and solvents) Trash & Debris Oil & Grease	
Heavy Industry/ Industrial Development	Sediments Heavy Metals Organic Compounds (including petroleum hydrocarbons) Trash & Debris Oxygen Demanding Substances Oil & Grease	
Restaurants	Trash & Debris Oxygen Demanding Substances Oil & Grease Bacteria & Viruses	
Parking Lots	Heavy Metals Trash & Debris Oil & Grease	Sediments Nutrients Oxygen Demanding Substances Pesticides
Retail Gasoline Outlets	Heavy Metals Organic Compounds (including petroleum hydrocarbons and solvents) Trash & Debris Oxygen Demanding Substances Oil & Grease	
Streets or Roads	Sediments Heavy Metals Organic Compounds (including petroleum hydrocarbons) Trash & Debris Oil & Grease.	Nutrients Oxygen Demanding Substances
1. Refer to Table 2-4 for more detail regarding which potential pollutants should be considered for specific projects. Evaluate all pollutants of concern on a project specific basis in the URMP.		

**Table 2-3 Pollutant Category Descriptions**

Sediments	Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.
Nutrients	Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.
Metals	Metals are raw material components in non metal products such as fuels, adhesives, paints, and other coatings. Primary source of metal pollution in stormwater are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.
Organic Compounds	Organic compounds are carbon based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.
Trash & Debris	Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.
Oxygen Demanding Substances	This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.
Oil and Grease	Oil and grease are characterized as high molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.
Bacteria and Viruses	Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.
Pesticides	Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

#### D) ESTABLISH STORMWATER BMPS

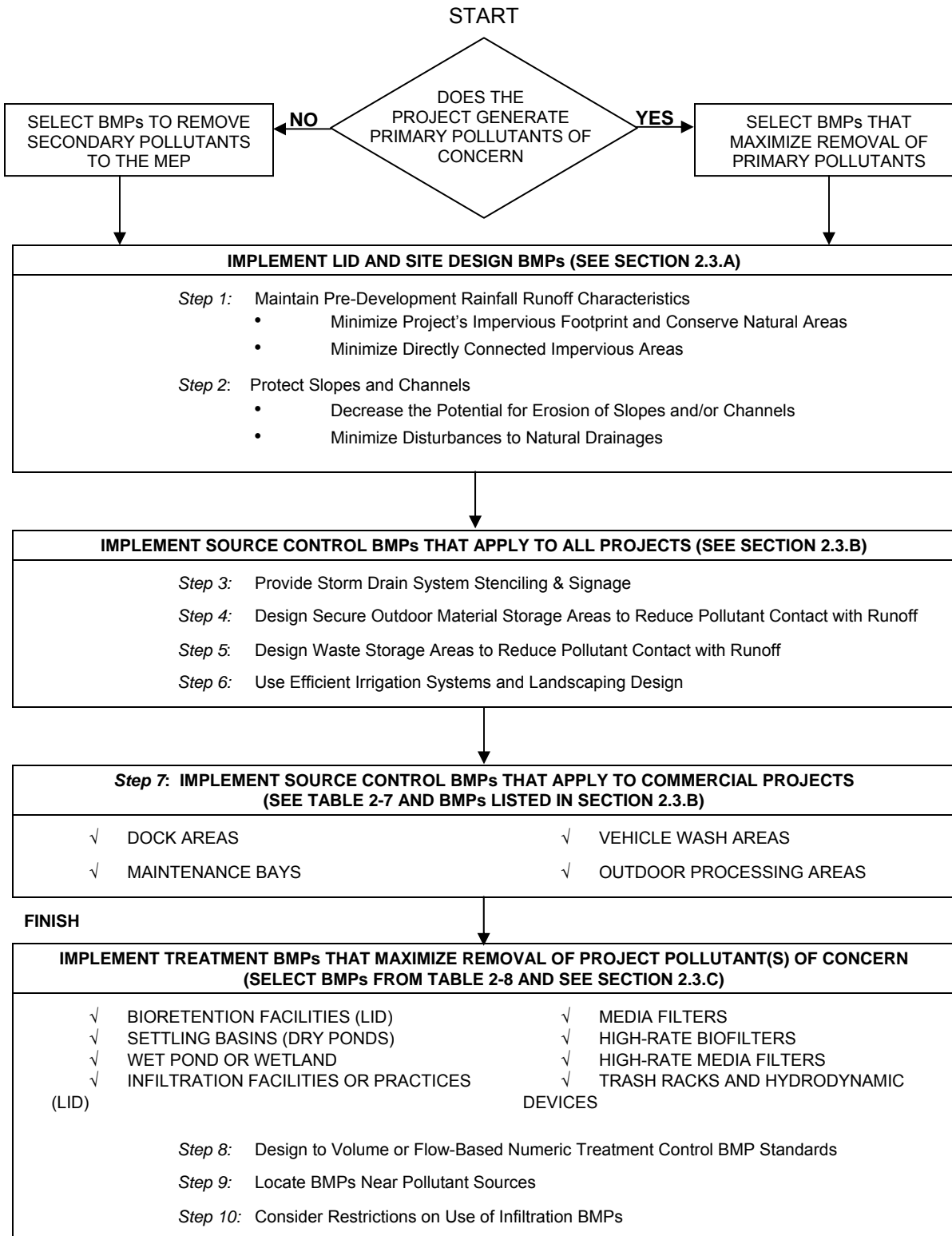
All priority projects must establish permanent stormwater BMPs to reduce pollutants and water quality impacts of the proposed project to the MEP. In preparing the USMP and selecting project BMPs, the preparer must go through the BMP selection process presented in Section 2.3 of this SUSMP to consider, incorporate, and implement Site Design, Source Control and Treatment BMPs. All projects must include applicable Source Control and Treatment BMPs. In addition, it should be emphasized that selection of Treatment BMPs must prioritize and maximize the removal of Primary Pollutants of Concern. If no Primary Pollutants of Concern are identified, Treatment BMPs shall be selected that remove Secondary Pollutants of Concern to the MEP. Treatment BMP design must also consider any impacts to treatment BMP performance due tidal influence of the subsurface storm drain system within the tidelands. This is particularly relevant to subsurface filtration systems, hydrodynamic separator systems, detention or infiltration basins, and wet ponds/wetlands.

Flow charts summarizing the BMP selection process for each priority pollutant category (i.e., commercial developments, automotive repair shops, restaurants, parking lots, streets or roads) are provided as Figures 2-2 through 2-8. Note that all SUSMP projects are considered commercial unless they specifically meet the definition of other priority pollutant categories. Projects that are not considered automotive repair shops, restaurants, parking lots, retail gasoline outlets, industrial or streets or roads should use Figure 2-2 and consider project specific conditions.

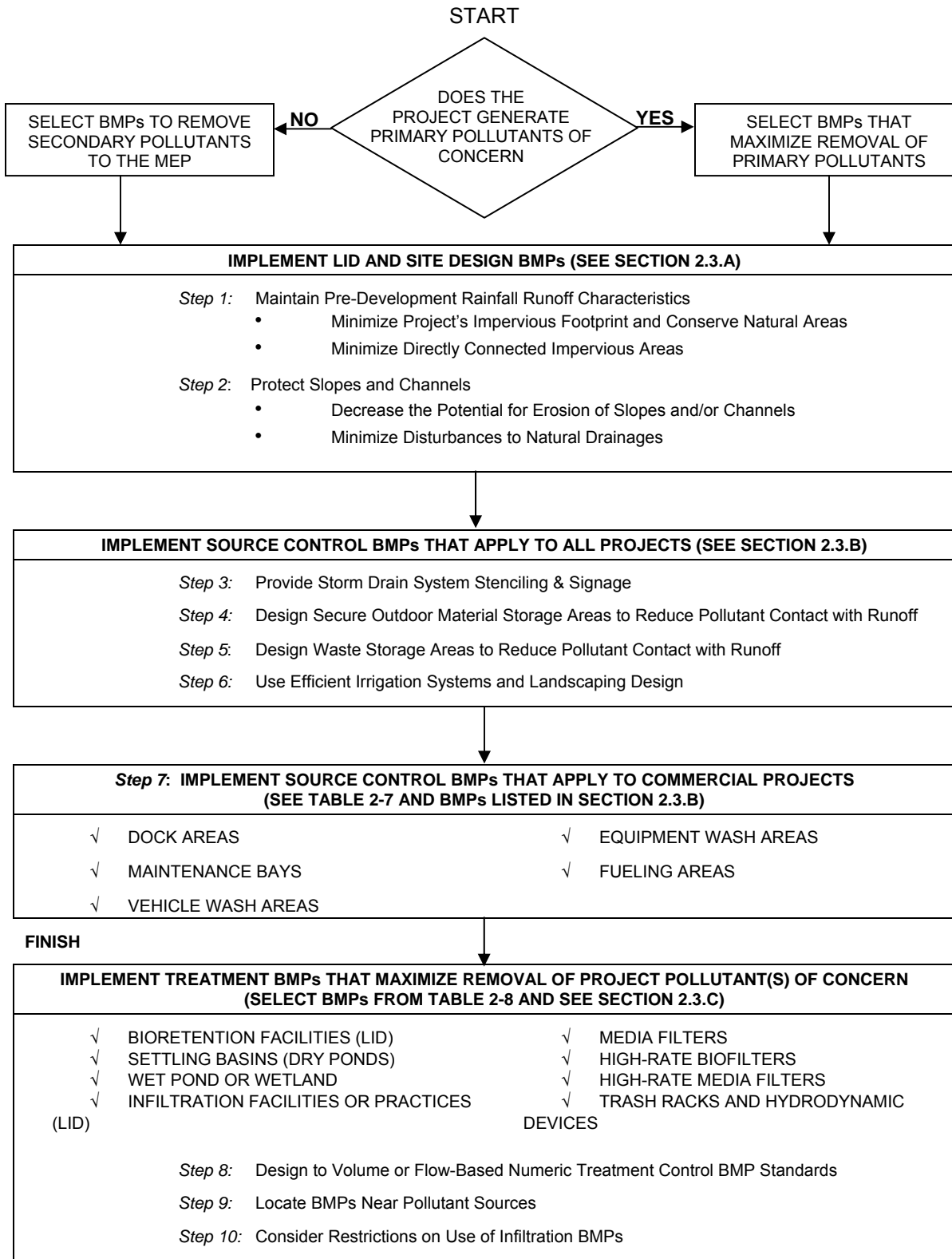
#### E) MAINTENANCE REQUIREMENTS

The USMP must include stormwater BMP maintenance provisions in an Operations and Maintenance Plan (O&M Plan) as outlined in Section 2.4 of this SUSMP.

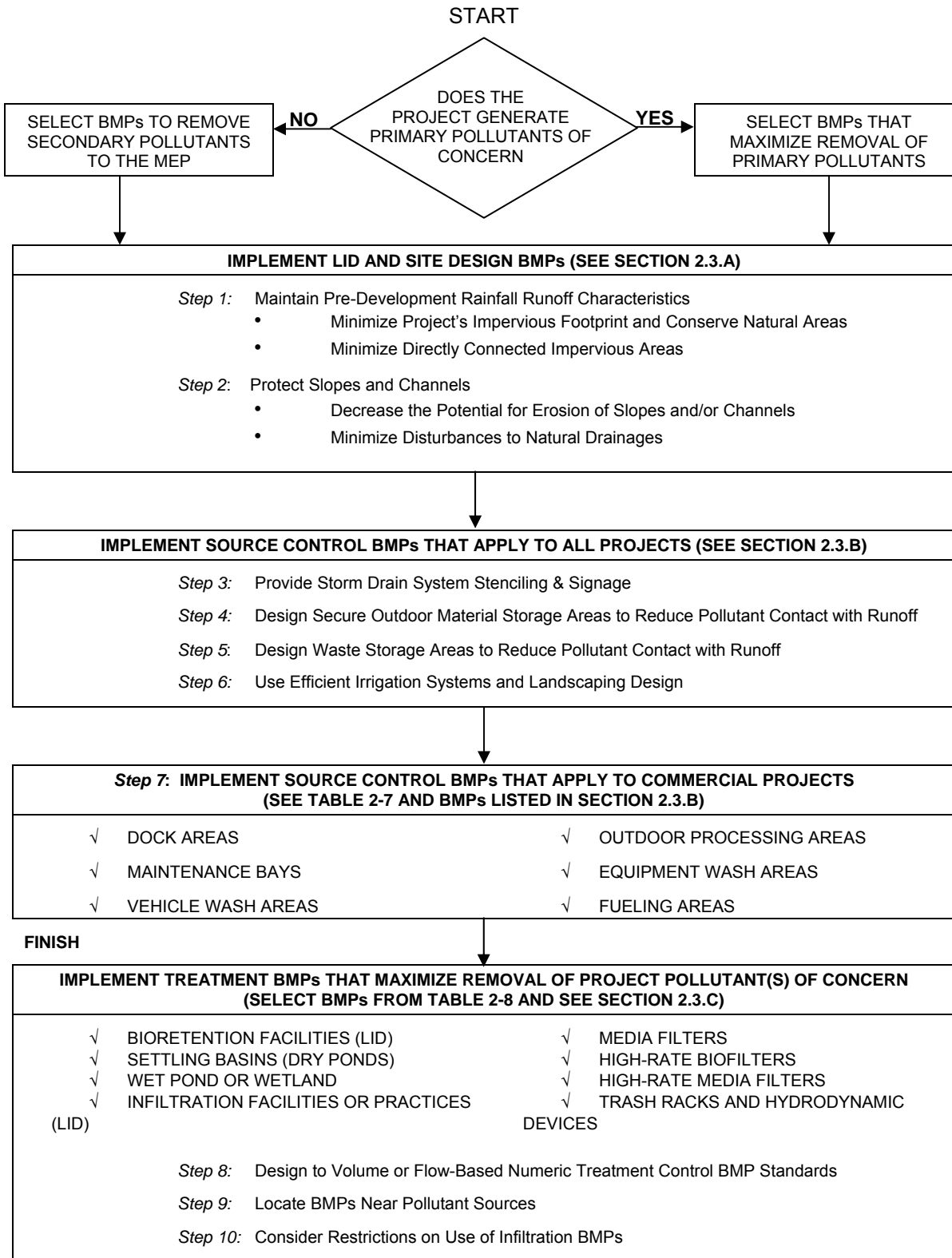
**Figure 2-2. Commercial Development BMP Selection Process**



**Figure 2-3. Automotive Repair Shop BMP Selection Process**

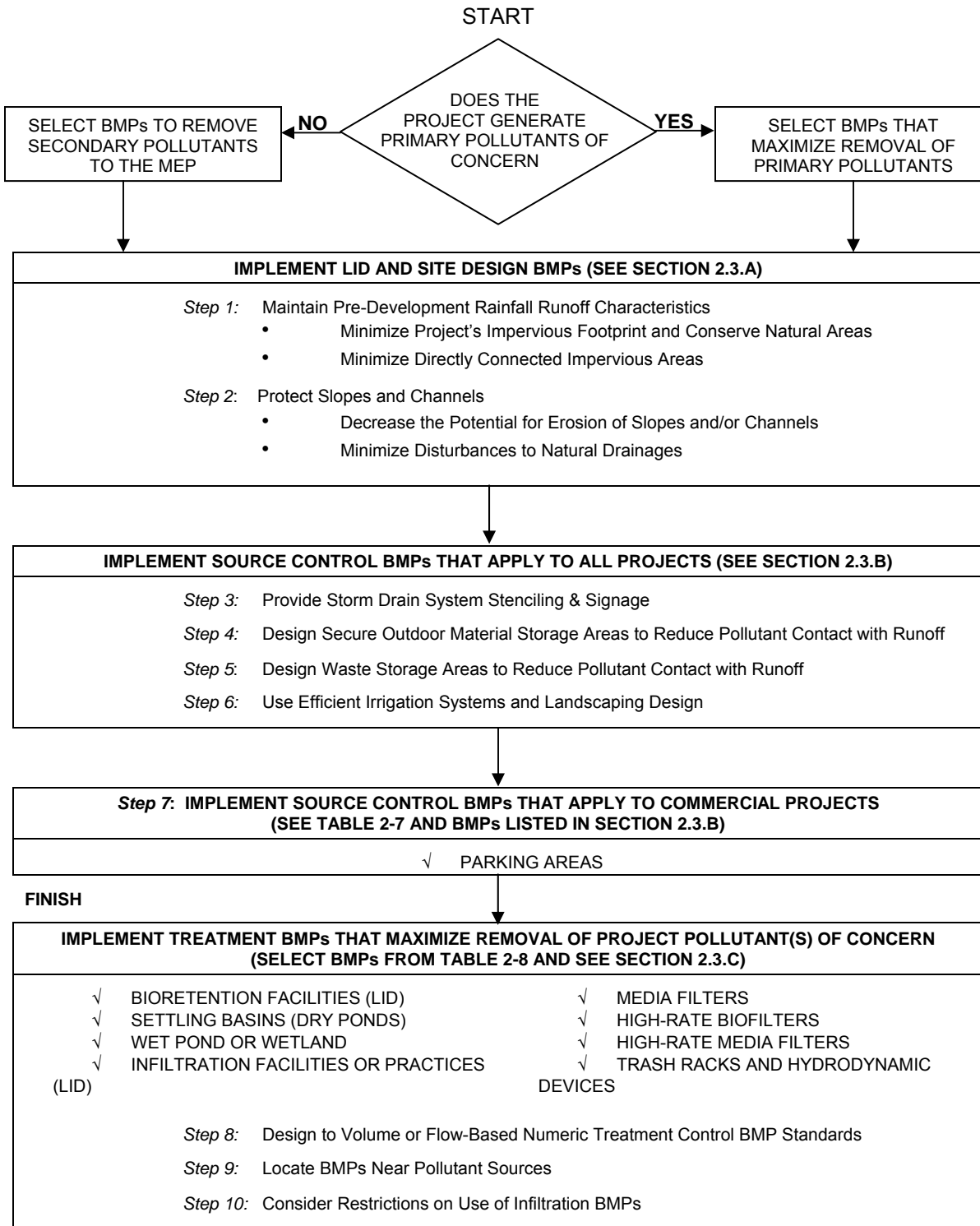


**Figure 2-4. Industrial Development BMP Selection Process**

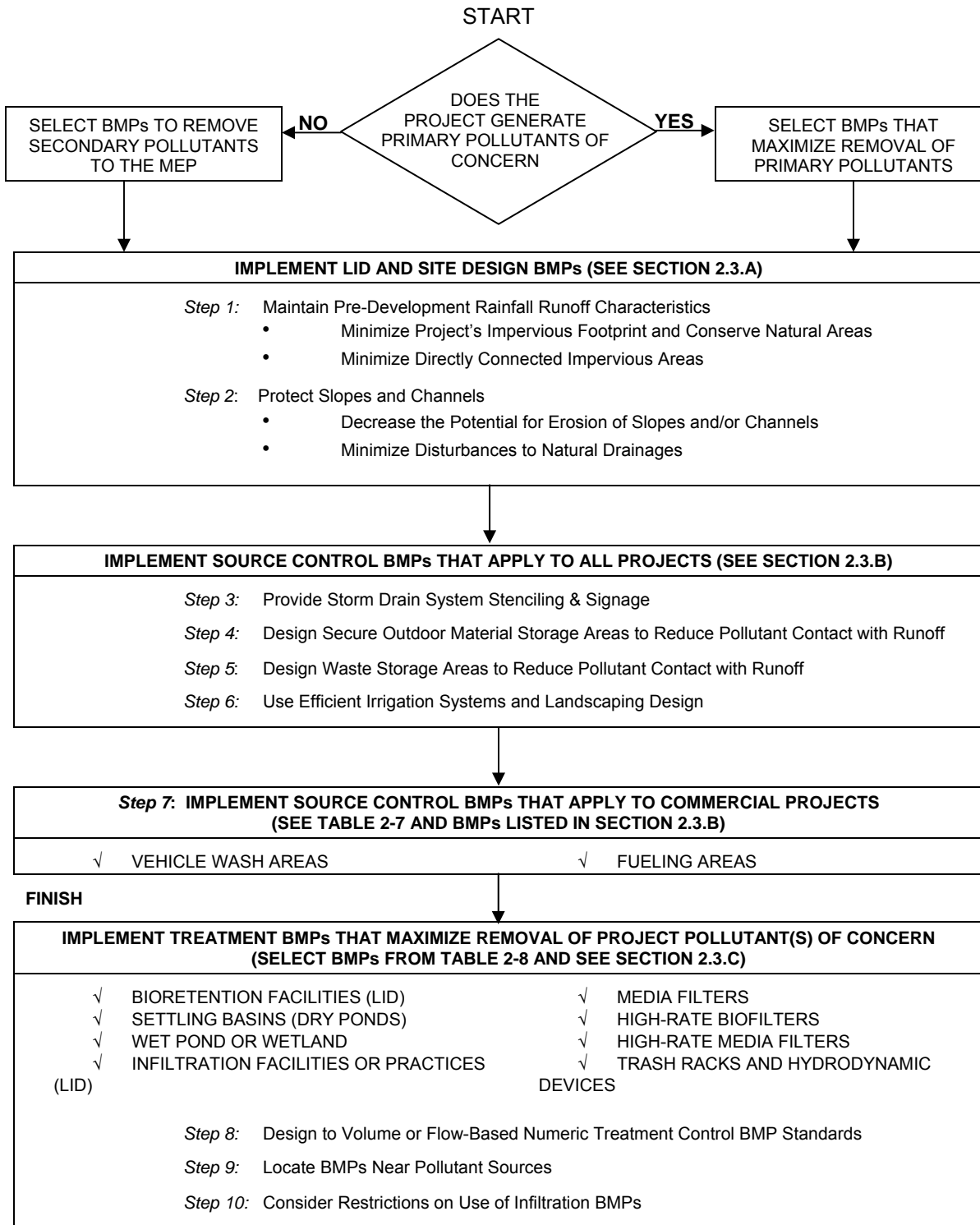




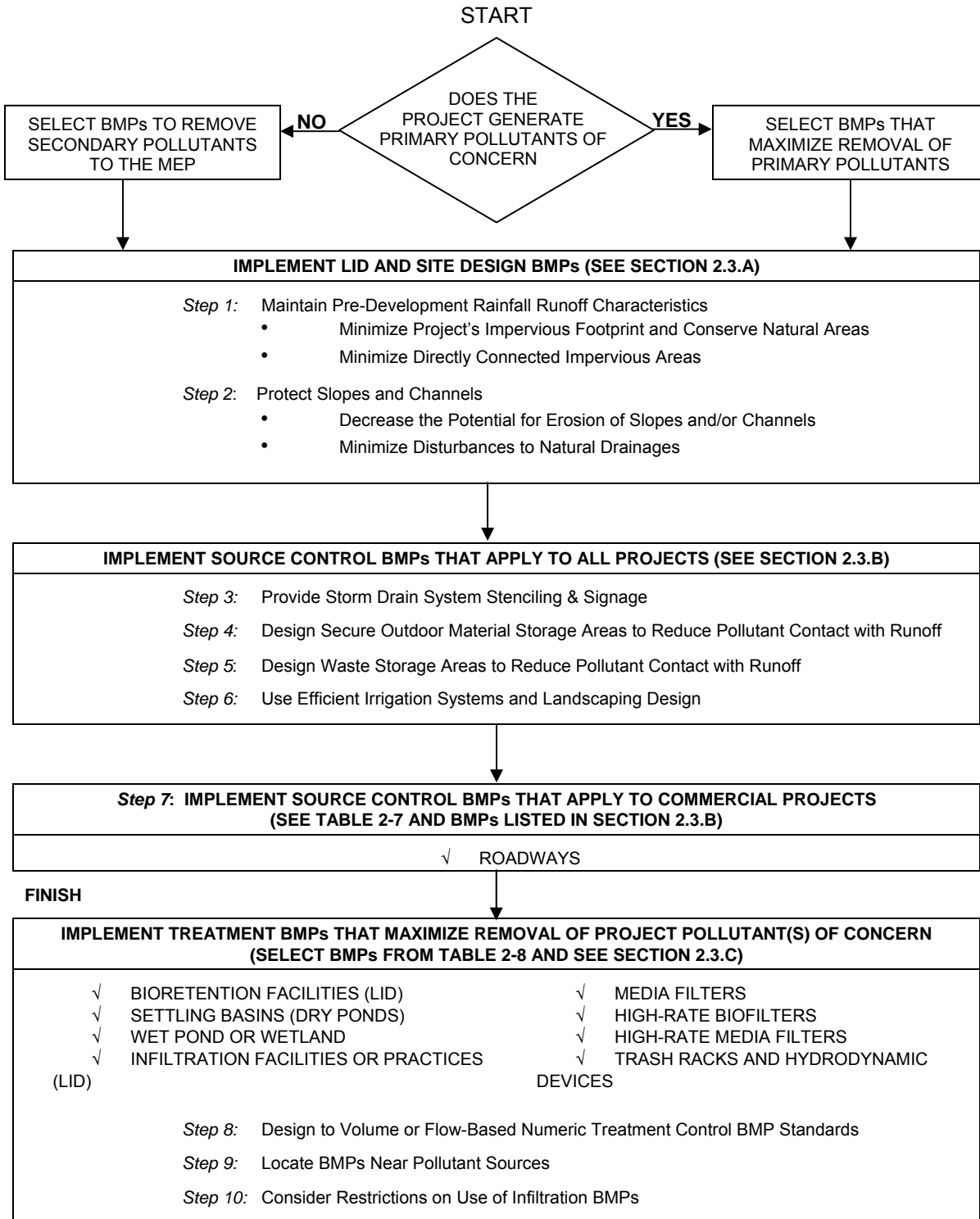
**Figure 2-6. Parking Lot BMP Selection Process**



**Figure 2-7. Retail Gasoline Outlet BMP Selection Process**



**Figure 2-8. Streets and Roads BMP Selection Process**



## 2.2 Identify Pollutants & Conditions Of Concern

Priority project proponents shall use this guidance to identify pollutants and conditions of concern, for which they need to mitigate or protect against. Once identified, appropriate control measures for these pollutants and conditions are specified in Section 2.3, “Establish Stormwater BMPs.” LID and site design and source control BMPs are required based on pollutants commonly associated with the proposed project type. Treatment Control BMPs are also required for the project’s expected pollutants of concern. The requirements listed in Sections VI.1.a-c of the Model SUSMP for identifying pollutants and conditions of concern are incorporated into the Port SUSMP.

### General Categories of Water Pollution

Urban runoff from a developed site has the potential to contribute pollutants, including oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the stormwater conveyance system and receiving waters. For the purposes of identifying pollutants of concern and associated stormwater BMPs, pollutants are grouped in nine general categories as indicated in Table 2-3.

#### A) IDENTIFY POLLUTANTS FROM THE PROJECT AREA

Using Table 2-4, identify pollutants that are anticipated to be generated from the proposed priority project categories. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

**Table 2-4 Anticipated and Potential Pollutants Generated by Land Use Type**

Priority Project Categories	General Pollutant Categories								
	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Commercial Development >1 acre	P <sup>(1)</sup>	P <sup>(1)</sup>		P <sup>(2)</sup>	X	P <sup>(5)</sup>	X	P <sup>(3)</sup>	P <sup>(5)</sup>
Heavy industry /industrial development	X		X	X	X	X	X		
Automotive Repair Shops			X	X <sup>(4)(5)</sup>	X		X		
Restaurants					X	X	X	X	
Parking Lots	P <sup>(1)</sup>	P <sup>(1)</sup>	X		X	P <sup>(1)</sup>	X		P <sup>(1)</sup>
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P <sup>(1)</sup>	X	X <sup>(4)</sup>	X	P <sup>(5)</sup>	X		
X = anticipated P = potential (1) A potential pollutant if landscaping exists on-site. (2) A potential pollutant if the project includes uncovered parking areas. (3) A potential pollutant if land use involves food or animal waste products. (4) Including petroleum hydrocarbons. (5) Including solvents.									

## B) IDENTIFY POLLUTANTS OF CONCERN

Pollutants generated by the proposed priority project that exhibit one or more of the following characteristics are considered primary pollutants of concern:

- Current loadings or historical deposits of the pollutant are impairing the beneficial uses of a receiving water;
- Elevated levels of the pollutant are found in water or sediments of a receiving water and/or have the potential to be toxic to or bioaccumulate in organisms therein; and
- Inputs of the pollutant are at a level high enough to be considered potentially toxic.

To identify primary pollutants of concern in receiving waters, each priority project shall, at a minimum, do the following:

1. For each of the proposed projects discharge points, identify the receiving water(s) that each discharge point proposes to discharge to, including hydrologic unit basin number(s), as identified in the most recent version of the *Water Quality Control Plan for the San Diego Basin*<sup>1</sup>, prepared by the San Diego Regional Water Quality Control Board.
2. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies<sup>2</sup>. List any and all pollutants for which the receiving waters are impaired.
3. Compare the list of pollutants for which the receiving waters are impaired with the pollutants anticipated to be generated by the project (as identified in Table 2-4). Any pollutants identified by Table 2-4 which are also causing impairment of receiving waters shall be considered primary pollutants of concern.

For projects where no primary pollutants of concern exist, those pollutants identified through the use of Table 2-4 shall be considered secondary pollutants of concern.

## C) IDENTIFY CONDITIONS OF CONCERN

Common impacts to the hydrologic regime resulting from development typically include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. These changes have the potential to permanently impact downstream channels and habitat integrity. A change to a priority project site's

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1. [http://www.swrcb.ca.gov/~rwqcb9/Programs/Planning\\_and\\_Services/SD\\_Basin/sd\\_basin.html](http://www.swrcb.ca.gov/~rwqcb9/Programs/Planning_and_Services/SD_Basin/sd_basin.html)  
2. [http://www.swrcb.ca.gov/tmdl/303d\\_lists.html](http://www.swrcb.ca.gov/tmdl/303d_lists.html), San Diego is in Region 9

hydrologic regime would be considered a condition of concern if the change would impact downstream channels and habitat integrity.

Because of these potential impacts, the following steps shall be followed by each priority project:

1. Evaluate the project's conditions of concern in a drainage study as part of the USMP. The drainage study and the USMP shall be prepared by a registered civil engineer in the State of California, with experience in drainage design and water resources management. The report shall consider the project area's location (from the larger watershed perspective), topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, wet season groundwater depth, and any other relevant hydrologic and environmental factors to be protected specific to the project area's watershed.
2. As part of the drainage study, a qualified, licensed professional shall provide a report on proposed infiltration techniques (trenches, basins, dry wells, permeable pavements with underground reservoir for infiltration) regarding any potential adverse geotechnical concerns. Geotechnical conditions such as: slope stability, expansive soils, compressible soils, seepage, groundwater depth, and loss of foundation or pavement subgrade strength should be addressed, and mitigation measures provided.
3. As part of the drainage study, the civil engineer shall conduct a field reconnaissance to observe and report on downstream conditions, including undercutting erosion, slope stability, vegetative stress (due to flooding, erosion, water quality degradation, or loss of water supplies) and the area's susceptibility to erosion or habitat alteration as a result of an altered flow regime.
4. The drainage study shall compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rate, flow velocity, runoff volume, time of concentration, and detention volume (if appropriate). These characteristics shall be developed for the two-year and 10-year frequency, Type B storm, of six-hour and 24-hour duration for the coastal areas of San Diego County (as described in the San Diego Hydrology Manual, September 2002). The largest peak flow should be included in the report. The drainage study shall report the project's conditions of concern based on the hydrologic and downstream conditions discussed above. Where downstream conditions of concern have been identified, the drainage study shall establish that pre-project hydrologic conditions affecting downstream conditions of concern would be maintained or improved by the proposed project, satisfactory to the Port, by incorporating the site design, source control, and treatment control requirements identified in Section 2.3.

Interim Hydromodification Criteria For Priority Development Projects that disturb 50 acres or more:

1. Priority Development Project (PDP) post-project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations (Interim Hydromodification Criteria), where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.

2. PDPs disturbing 50 acres or more shall implement hydrologic controls to manage post-project runoff flow rates and durations as required by the Interim Hydromodification Criteria.

## 2.3 Establish Stormwater BMPs

LID and site design BMPs reduce the need for source and/or treatment control BMPs, and source control BMPs may reduce the amount of treatment control BMPs needed. Throughout all the following sections, all priority projects shall consider, and incorporate and implement where expressly required by the Permit and if not so required where determined applicable and feasible by the Port, stormwater BMPs into the project design, in the following progression:

- LID and site Design BMPs
- Source Control BMPs
- Treatment Control BMPs

Priority projects must implement LID and site design BMPs and source control BMPs, and must also implement treatment control BMPs unless a waiver is granted based on the infeasibility of all treatment control BMPs. LID BMPs must meet minimum requirements set out in the Municipal Permit section D.1d.(4). BMPs must also achieve certain performance standards set out in the municipal permit section D.1.d.(5) and (6) . Selection of BMPs from the menus included and the rules set forth in the Port SUSMP Document fulfills these requirements.

In addition, runoff treated by LID and site design or source control BMPs, such as rooftop runoff treated in landscaping, may be useful in reducing the quantity of runoff required to be treated in Section 2.3C “Treatment Control BMPs.”

### A) LOW IMPACT DEVELOPMENT (LID) AND SITE DESIGN BMPS

Priority projects shall be designed so as to minimize directly connected impervious surfaces and to promote infiltration using LID techniques. Priority projects shall, to the maximum extent practicable, minimize the introduction of pollutants and conditions of concern that may result in significant impacts, generated from site runoff to the stormwater conveyance system. Priority Projects shall also control post-development peak stormwater runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat. Priority projects can address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Many of these techniques are outlined and reviewed in the County of San Diego’s LID Handbook and Appendices. Mimicking a site’s natural hydrologic regime can be pursued by:

- Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the stormwater conveyance system, and minimizing clearing and grading.
- Providing runoff storage measures dispersed throughout a site's landscape with the use of bioretention facilities and detention, retention, and infiltration practices.
- Implementing on-lot hydrologically functional landscape design and management practices.

These design principles offer an innovative approach to urban stormwater management, one that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates stormwater controls throughout the urban landscape. Useful resources for applying these principles, referenced in the appendix, include the County of San Diego's LID Handbook (2007), *Start at the Source* (1999), *Low-Impact Development Design Strategies* (1999), the City of Portland's Stormwater Manual (2004), and the Contra Costa Clean Water Program's *Stormwater C.3 Guidebook* (2006).

#### Step 1. Objective: Maintain Pre-Development Rainfall Runoff Characteristics

Priority projects shall control post-development peak stormwater runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion. Design concepts to maintain pre-development conditions are presented in Table 2-5. In addition, projects should control runoff discharge volumes and durations to the maximum extent practicable using the site design, source control, and treatment control requirements identified in Section 2.3.

#### Step 2. Protect Slopes and Channels

Project plans shall include stormwater BMPs to decrease the potential for erosion of slopes and/or channels, consistent with local codes and ordinances and with the approval of all agencies with jurisdiction, e.g., the U.S. Army Corps of Engineers, the San Diego RWQCB, and the California Department of Fish and Game. The following design principles shall be considered, and incorporated and implemented, unless determined to be infeasible by both the project proponent and the Port:

- Minimize disturbances to Natural Drainages
- Convey runoff safely from the tops of slopes.
- Vegetate slopes with native or drought tolerant vegetation.
- Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.
- Stabilize permanent channel crossings.

- Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.
- Other design principles that are comparable and equally effective.

**Table 2-5 Design Concepts to Maintain Pre-Development Conditions**

<p>Design Concept 1:</p> <p>Minimize Project's Impervious Footprint &amp; Conserve Natural Areas</p>	<p>The following site design options shall be considered and, incorporated and implemented unless determined to be infeasible by both the project proponent and the Port, during the site planning and approval process, consistent with applicable General Plan policies and other development regulations.</p> <ol style="list-style-type: none"> <li>1. Minimize and disconnect impervious surfaces. This can be achieved in various ways, including, but not limited to increasing building density (number of stories above or below ground) and developing land use regulations seeking to limit impervious surfaces. Decreasing the project's footprint can substantially reduce the project's impacts to water quality and hydrologic conditions.</li> <li>2. Conserve natural areas, soils, and vegetation where feasible. This can be achieved by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition. The following list provides a guideline for determining the least sensitive portions of the site, in order of increasing sensitivity. Project proponents should also refer to the City of San Diego MSCP or other biological regulations as appropriate.       <ol style="list-style-type: none"> <li>a. Areas devoid of vegetation, including previously graded areas and agricultural fields.</li> <li>b. Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands.</li> <li>c. Areas of chamise or mixed chaparral, and non-native grasslands.</li> <li>d. Areas containing coastal scrub communities.</li> <li>e. All other upland communities.</li> <li>f. Occupied habitat of sensitive species and all wetlands (see definition of "Environmentally Sensitive Area").</li> <li>g. All areas necessary to maintain the viability of wildlife corridors.</li> </ol> </li> <li>3. Construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces, such as pervious concrete, permeable asphalt, unit pavers, and granular materials.</li> <li>4. Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.</li> <li>5. Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.</li> <li>6. Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.</li> <li>7. Use natural drainage systems to the maximum extent practicable.</li> <li>8. Other site design options that are comparable, and equally effective.</li> <li>9. Minimize soil compaction in landscaped or natural areas.</li> </ol>
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Table 2-5 Design Concepts to Maintain Pre-Development Conditions

Design Concept 2:  Minimize Directly Connected Impervious Areas (DCIAs)	Priority projects shall consider, and incorporate and implement the following design characteristics, unless determined to be infeasible by both the project proponent and the Port. <ol style="list-style-type: none"> <li>1. Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.</li> <li>2. Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.</li> <li>3. Other design characteristics that are comparable and equally effective.</li> </ol>
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B) SOURCE CONTROL BMPS

Step 3. Provide Storm Drain System Stenciling and Signage

Storm drain stencils are highly visible source control messages, typically placed directly adjacent to storm drain inlets. The stencils contain a brief statement that prohibits the dumping of improper materials into the urban runoff conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. Priority projects shall include the following requirements in the project design.

- Provide stenciling or labeling of all storm drain inlets and catch basins within the project area with prohibitive language (such as: “NO DUMPING – DRAINS TO BAY”) and/or graphical icons to discourage illegal dumping.
- Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.
- Maintain legibility of stencils and signs.

Step 4. Design Outdoor Material Storage Areas to Reduce Pollution Introduction

Improper storage of materials outdoors may increase the potential for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the urban runoff conveyance system. Where the priority project plans include outdoor areas for storage of hazardous materials that may contribute pollutants to the urban runoff conveyance system, the following stormwater BMPs are required:

1. Hazardous materials with the potential to contaminate urban runoff shall either be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the stormwater conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

2. The storage area shall be paved and sufficiently impervious to contain leaks and spills.
3. The storage area shall have a roof or awning to minimize direct precipitation within the secondary containment area.

#### Step 5. Design Trash Storage Areas to Reduce Pollution Introduction

All trash container areas shall meet the following requirements (limited exclusion: detached residential homes):

1. Paved with an impervious surface, designed not to allow run-on from adjoining areas, screened or walled to prevent off-site transport of trash; and
2. Provide attached lids on all trash containers that exclude rain, or roof or awning to minimize direct precipitation.

#### Step 6. Use Efficient Irrigation Systems & Landscape Design

Priority projects shall design the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the stormwater conveyance system. (Limited exclusion: detached residential homes.) In compliance with the Water Conservation in Landscaping Act, the following methods to reduce excessive irrigation runoff shall be considered, and incorporated and implemented, unless determined to be infeasible by both the project proponent and the Port:

1. Employing rain shutoff devices to prevent irrigation after precipitation.
2. Designing irrigation systems to each landscape area's specific water requirements.
3. Using flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.
4. Employing other comparable, equally effective, methods to reduce irrigation water runoff.

#### Step 7. Incorporate Requirements Applicable to Individual Priority Project Categories

Where identified in Table 2-6, the following requirements shall be incorporated into applicable priority projects during the stormwater BMP selection and design process. Projects shall adhere to each of the individual priority project category requirements that apply to the project (e.g., a restaurant with more than 15 parking spaces would be required to incorporate the requirements for "Equipment Wash Areas and "Parking Areas" into the project design). Source control BMP requirements for individual priority project features are identified in Table 2-7.

**Table 2-6 Site Design and Source Control Stormwater BMP Selection Matrix.**

Priority Project Category	Site Design BMPs <sup>(1)</sup>	Source Control BMPs <sup>(2)</sup>	Requirements Applicable to Individual Priority Project Features <sup>(3)</sup>							
			Dock Areas	Maintenance Bays	Vehicle Wash Areas	Outdoor Processing Areas	Equipment Wash Areas	Parking Areas	Roadways	Fueling Areas
Commercial Projects > 1 acre	R	R	R	R	R	R				
Industrial Development > 1 Acre	R	R	R	R	R	R	R			R
Automotive Repair Shop	R	R	R	R	R		R			R
Restaurants	R	R	R				R			
Parking Lots	R	R						R <sup>(4)</sup>		
Retail Gasoline Outlets	R	R			R					R
Streets, Highways & Freeways	R	R							R	
R=Required; select BMPs as required from the applicable steps in Section 2.2.A and B or equivalent as identified in Appendix A.  (1) Refer to Section 2.3.A (2) Refer to Section 2.3.B (3) Priority project categories must apply specific stormwater BMP requirements, where applicable. Projects are subject to the requirements of all priority project categories that apply. (4) Applies if the paved area totals ≥5,000 square feet or with ≥15 parking spaces and is potentially exposed to urban runoff.										

**Table 2-7 Source Control BMPs for Individual Priority Categories**

Individual Priority Project Feature	Source Control BMPs
Dock Areas	<ul style="list-style-type: none"> <li>▪ Cover loading dock areas, or design drainage to preclude urban run-on and runoff.</li> <li>▪ Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.</li> <li>▪ Other features which are comparable and equally effective.</li> </ul>
Maintenance Bays	<ul style="list-style-type: none"> <li>▪ Repair/maintenance bays shall be indoors; or, designed to preclude urban run-on and runoff; and</li> <li>▪ Design a repair/maintenance bay drainage system to capture all wash water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited.</li> </ul> <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> <li>▪ Other features which are comparable and equally effective.</li> </ul>
Vehicle Wash/Steam Cleaning Areas	<ol style="list-style-type: none"> <li>1. Areas shall be self-contained; or covered with a roof or overhang;</li> <li>2. Equipped with a clarifier or other pretreatment facility;</li> <li>3. Properly connected to a sanitary sewer.</li> <li>4. Other features which are comparable and equally effective.</li> </ol>
Outdoor Processing Areas	<p>Outdoor process equipment operations, such as rock grinding or crushing, painting or coating, grinding or sanding, degreasing or parts cleaning, landfills, waste piles, and wastewater and solid waste treatment and disposal, and other operations determined to be a potential threat to water quality by the Port shall adhere to the following requirements.</p> <ol style="list-style-type: none"> <li>1. Cover or enclose areas that would be the most significant source of pollutants; or, slope the area toward a dead-end sump; or, discharge to the sanitary sewer system. Discharges to the sanitary sewer must comply with City of San Diego metropolitan Waste Water Department Requirements.</li> <li>2. Grade or berm area to prevent run-on from surrounding areas.</li> <li>3. Installation of storm drains in areas of equipment repair is prohibited.</li> <li>4. Other features which are comparable or equally effective.</li> </ol>
Equipment Wash Areas	<p>Outdoor equipment/accessory washing and steam cleaning activities at priority projects shall use the following:</p> <ol style="list-style-type: none"> <li>1. Be self-contained; or covered with a roof or overhang;</li> <li>2. Be equipped with a clarifier, grease trap or other pretreatment facility, as appropriate;</li> <li>3. Be properly connected to a sanitary sewer.</li> <li>4. Other features which are comparable or equally effective.</li> </ol>
Parking Areas	<p>To minimize the offsite transport of pollutants from parking areas, the following design concepts shall be considered, and incorporated and implemented, unless determined to be infeasible by both the project proponent and the Port:</p> <ol style="list-style-type: none"> <li>1. Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design.</li> <li>2. Overflow parking (parking stalls provided in excess of the Port's minimum parking requirements) should be constructed with permeable paving.</li> <li>3. Other design concepts that are comparable and equally effective.</li> </ol>
Roadways	<p>Priority roadway projects shall select treatment control BMPs following the treatment control selection procedure identified in Section 2.3, "Establish Stormwater BMPs."</p>
Fueling Areas	<p>Retail and non-retail fuel dispensing areas shall contain the following:</p> <ol style="list-style-type: none"> <li>1. Overhanging roof structure or canopy. The cover's minimum dimensions must be equal to or greater than the area within the grade break. The cover must not drain onto the fuel dispensing area and the downspouts must be routed to prevent drainage across the fueling area. The fueling area shall drain to the project's treatment control BMP(s) prior to discharging to the stormwater conveyance system.</li> <li>2. Paved with Portland cement concrete (or equivalent smooth impervious surface). The use of asphalt concrete shall be prohibited.</li> <li>3. Have an appropriate slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of urban runoff.</li> <li>4. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.</li> </ol>

### C) TREATMENT CONTROL BMPS

Minimizing a development's detrimental effects on water quality can be most effectively achieved through the use of a combination of site design, source and treatment control stormwater BMPs. Where projects have been designed to minimize, to the maximum extent practicable, the introduction of anticipated pollutants of concern that may result in significant impacts to the receiving waters through the implementation of site design and source control stormwater BMPs, the development would still have the potential for pollutants of concern to enter the stormwater conveyance system. Therefore, priority projects shall be designed to remove pollutants of concern from the stormwater conveyance system to the maximum extent practicable through the incorporation and implementation of treatment control BMPs.

In meeting the requirements in this section, priority projects shall implement a single or combination of stormwater BMPs that will remove anticipated pollutants of concern in site runoff to the maximum extent practicable. Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the Copermittee when a feasibility analysis has been conducted which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible.

To select a structural treatment BMP using the Treatment Control BMP Selection Matrix (Table 2-8), each priority project shall compare the list of pollutants for which the downstream receiving waters are impaired (if any), with the pollutants anticipated to be generated by the project (as identified in Table 2-4). Any pollutants identified by Table 2-4 which are also causing a Clean Water Act section 303(d) impairment of the receiving waters of the project shall be considered primary pollutants of concern. Priority projects that are anticipated to generate a primary pollutant of concern shall meet all applicable requirements in Section 2.3C, and shall select a single or combination of stormwater BMPs from Table 2-8, which maximizes pollutant removal for the particular primary pollutant(s) of concern.

Priority projects that are not anticipated to generate a pollutant for which the receiving water is Clean Water Act Section 303(d) impaired shall meet applicable standard requirements in Section 2.3C, and shall select a single or combination of stormwater BMPs from Table 2-8, which are effective for pollutant removal of the identified secondary pollutants of concern, consistent with the "maximum extent practicable" standard defined in Attachment D of the Municipal Permit.

Where a site generates both primary and secondary pollutants of concern, primary pollutants of concern receive priority for BMP selection. For such sites, selected BMPs must only maximize pollutant removal for the primary pollutants of concern. Where a site generates only secondary pollutants of concern, selected BMPs shall target the secondary pollutant of concern determined to be most significant for the project. Selected BMPs must be effective for the widest range of pollutants of concern anticipated to be generated by a priority project (as identified in Table 2-4),

consistent with the maximum extent practicable standard defined in Attachment D of the Municipal Permit.

**Table 2-8 Treatment Control BMP Selection Matrix<sup>(1)</sup>**

<b>Pollutants of Concern</b>	<b>Bioretention Facilities (LID)</b>	<b>Settling Basins (Dry Ponds)</b>	<b>Wet Ponds and Wetlands</b>	<b>Infiltration Facilities or Practices (LID)</b>	<b>Media Filters</b>	<b>High-rate biofilters</b>	<b>High-rate media filters</b>	<b>Trash Racks &amp; Hydro-dynamic Devices</b>
<b>Coarse Sediment and Trash</b>	High	High	High	High	High	High	High	High
<b>Pollutants that tend to associate with fine particles during treatment</b>	High	High	High	High	High	Medium	Medium	Low
<b>Pollutants that tend to be dissolved following treatment</b>	Medium	Low	Medium	High	Low	Low	Low	Low

**Notes on Treatment Control BMP Categories**

All rankings are relative. Ranking of all facilities assumes proper sizing, design, and periodic maintenance. Following are general descriptions of each category.

- **Bioretention Facilities** (infiltration planters, flow-through planters, bioretention areas, and bioretention swales). Facilities are designed to capture runoff and infiltrate slowly through soil media which also supports vegetation. Bioretention facilities, except for flow-through planters, effectively promote infiltration into native soils. In clay soils, facilities may capture excess treated runoff in an underdrain piped to the municipal storm drain system. Typical criteria: an infiltration surface area at least 4% of tributary impervious area, 6-inch average depth of top reservoir, 18-inch soil layer, 12-inch to 18-inch gravel subsurface storage layer.
- **Settling Basins and Wetlands** (extended detention basins, “wet” basins, decorative or recreational lakes or water features also used for stormwater treatment, constructed wetlands). Facilities are designed to capture a minimum water quality volume of 80% of total runoff and detain for a minimum of 48 hours. Some wetland designs have proven effective in removing nutrients, but performance varies.
- **Infiltration Facilities or Practices** (infiltration basins, infiltration trenches, dry wells, dispersal of runoff to landscape, pervious pavements). These facilities and landscape designs capture, retain, and infiltrate a minimum of 80% of runoff into the ground. Infiltration facilities are generally only feasible in permeable (Hydrologic Soil Group A or B) soils. Volume and area of infiltration facilities depends on soil permeability and safety factor used. Typical criteria: Infiltration facilities should have pretreatment to remove silt to prolong life of the facility. A 10-foot vertical separation from average seasonal groundwater depth is required. Dispersal to landscape may be accomplished in any soil type and generally requires a maximum 2:1 ratio impervious:pervious and concave topography to ensure the first 1 inch of rainfall is retained.

- **Media Filters** (sand filters). Filters designed to treat runoff produced by a rainfall of 0.2 inches per hour (or 2 × 85<sup>th</sup> percentile hourly rainfall intensity) by slow infiltration through sand or other media. Typical criteria: Surface loading rate not to exceed 5 inches/hour. Entire surface of the sand must be accessible for maintenance.
  
- **High Rate Biofilters** (tree wells, typically proprietary). Biofilters with specially designed media to rapidly filter runoff while removing some pollutants. Filterra® (proprietary version) recommends surface loading rates of up to 100 inches/hour.
  
- **High-rate Media Filters** (typically proprietary). Vaults with replaceable cartridge filters filled with inorganic media.
  
- **Drainage Inserts** have low effectiveness in removing pollutants that tend to associate with fine particles and have medium effectiveness in removing coarse sediment and trash. They are sometimes used to augment more effective treatment facilities and are sometimes used alone when more effective facilities have been deemed infeasible.

**Notes on Pollutants of Concern:**

In Table 3, Pollutants of Concern are grouped as gross pollutants, pollutants that tend to associate with fine particles, and pollutants that remain dissolved.

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

Alternative stormwater BMPs not identified in Table 2-8 may be approved at the discretion of the Port, provided the alternative BMP is as effective in removal of pollutants of concern as other feasible BMPs listed in Table 2-8.

#### Step 8. Design to Treatment Control BMP Standards

All priority projects shall design, construct and implement structural treatment control BMPs that meet the design standards of this section, unless specifically exempted by the limited exclusions listed at the end of Step 8. Structural treatment control BMPs required by this section shall be operational prior to the use of any dependent development, and shall be located and designed in accordance with the requirements here in Step 8 and below in Step 9.

Treatment control BMPs must be designed to meet one of the volume-based or flow-based numeric sizing criteria identified in Table 2-9. Treatment BMP design must also consider any impacts to treatment BMP performance due tidal influence of the subsurface storm drain system within the tidelands. This is particularly relevant to subsurface filtration systems, hydrodynamic separator systems, detention or infiltration basins, and wet ponds/wetlands.

#### Limited Exclusions:

1. Proposed restaurants, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical sizing criteria requirements listed in Section 2.3.C, Step 8.
2. Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed in Section 2.3.C, Step 8 apply only to the addition, and not to the entire development.

**Table 2-9 Numeric Sizing Criteria for Structural Treatment Control BMPs**

***Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:***

1. The volume of runoff produced from a 24-hour 85<sup>th</sup> percentile storm event, as determined from the County of San Diego's 85<sup>th</sup> percentile isopluvial map at <http://www.sdcounty.ca.gov/dpw/docs/pct85.pdf>. If a project is located between isopluvial contours, the rainfall amount used to design volume-based BMPs shall be interpolated between contours for the project site.
2. The volume of runoff produced by the 85<sup>th</sup> percentile 24-hour runoff event, determined as the maximized capture urban runoff volume for the area, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87, (1998)*; or
3. The volume of annual runoff based on unit basin storage volume, to achieve 90 percent or more volume treatment by the method recommended in *California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (1993)*, or
4. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85<sup>th</sup> percentile 24-hour runoff event. Under this criterion, hourly rainfall data may be used to calculate the 85<sup>th</sup> percentile storm event by calculating storm event totals for the period of historic record where individual storm events are separated by a minimum of six hours of no rain. The 85<sup>th</sup> percentile storm event shall be determined by ranking storm event totals from the period of record. National Weather Service gauges or other credible sources acceptable to the Port shall be used to obtain hourly rainfall data from a minimum 20-year period.

***Flow-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:***

1. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour for each hour of a storm event; or
2. The maximum flow rate of runoff produced by the 85<sup>th</sup> percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two, for each hour of a storm event; or
3. The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85<sup>th</sup> percentile hourly rainfall intensity multiplied by a factor of two, for each hour of a storm event.

### Step 9. Locate BMPs Near Pollutant Sources

Structural treatment control stormwater BMPs should be implemented close to pollutant sources to minimize costs and maximize pollutant removal prior to runoff entering receiving waters. Such BMPs may be located on- or off-site, used singly or in combination, or shared by multiple new developments, pursuant to the following requirements:

1. All structural treatment control BMPs shall be located so as to infiltrate, filter, and/or treat the required runoff volume or flow prior to its discharge to any receiving water body supporting beneficial uses;
2. Multiple post-construction structural treatment control BMPs for a single priority development project shall collectively be designed to comply with the design standards of Step 8;
3. Shared stormwater BMPs shall be operational prior to the use of any dependent development or phase of development. The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use;
4. Interim stormwater BMPs that provide equivalent or greater treatment than is required by Step 8 may be implemented by a dependent development until each shared BMP is operational. If interim BMPs are selected, the BMPs shall remain in use until permanent BMPs are operational.

### Step 10. Restrictions on Use of Infiltration BMPs

Due to the presence of high tidally influenced groundwater throughout the Port tide-lands jurisdiction, it is not anticipated that Infiltration BMPs would be considered feasible for most projects. However, there may be specific applications in specific locations that may be suitable. If Infiltration BMPs are implemented, they must meet the conditions presented in this section. At a minimum, use of structural treatment BMPs that are designed to primarily function as infiltration devices shall meet the following conditions<sup>3</sup>:

- Urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants, such as sedimentation or filtration, prior to infiltration.
- All dry weather flows shall be diverted from infiltration devices except for those non-stormwater discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1): diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to stormwater conveyance systems, uncontaminated pumped ground water, foundation drains, springs, water from crawl

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3. These conditions do not apply to structural treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)

space pumps, footing drains, air conditioning condensation, flow from riparian habitats and wetlands, water line flushing, landscape irrigation, discharges from potable water sources other than water main breaks, irrigation water, individual residential car washing, and dechlorinated swimming pool discharges.

- Pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used.
- The vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet or as approved on an individual, site-specific basis by the Port. Where groundwater does not support beneficial uses, this vertical distance criterion may be reduced, provided groundwater quality is maintained.
- The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic content, clay content, and infiltration rate) that are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses.
- Infiltration structural treatment BMPs shall not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); and nurseries.
- The horizontal distance between the base of any infiltration structural BMP and any water supply wells shall be 100 feet or as approved on an individual, site-specific basis by the Port.

Where infiltration BMPs are considered, their performance shall be evaluated by the project proponent for impacts on groundwater quality and approved by the Port. Three factors significantly influence the potential for urban runoff to contaminate ground water. They are (i) pollutant mobility, (ii) pollutant abundance in urban runoff, (iii) and soluble fraction of pollutant. The risk of contamination of groundwater may be reduced by pretreatment of urban runoff. A discussion of limitations and guidance for infiltration practices is contained in, *Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration, Report No. EPA/600/R-94/051, USEPA (1994)*.

## 2.4 Proof of Ongoing Stormwater BMP Maintenance

Stormwater BMP maintenance will be provided by the Port for capital projects (i.e., public entity maintenance) and will be provided by individual tenants for tenant projects (i.e., through lease

provisions). As part of project review for both capital and tenant priority projects that include interim or permanent structural BMPs, the Port will verify that appropriate mechanisms are in-place. Maintenance requirements identified in below are required by the Municipal Permit and the Model SUSMP.

A) MAINTENANCE REQUIREMENTS

- (1) Operation & Maintenance (O&M) Plan: The Port will require that a copy of a satisfactory Operation & Maintenance (O&M) plan, prepared by the tenant/project proponent is included in the USMP. The O&M Plan must describe the designated responsible party to manage the stormwater BMP(s), any necessary employee training and duties, operating schedule, maintenance frequency, specific maintenance activities, copies of resource agency permits, and any other necessary activities. At a minimum, the O&M Plan shall require the inspection and servicing of all structural BMPs on an annual basis. Further, annual written verification of effective operation and maintenance of each approved treatment control BMP by the responsible party is required to be submitted to the Port prior to each wet season. The tenant shall document all maintenance requirements and shall retain records for at least 5 years. These documents shall be made available to the Port for inspection upon request at any time. O&M Plans will also be prepared for capital projects that include structural BMPs.
- (2) Access Easement/Agreement: The Port maintains rights to access tenant properties as part of lease provisions. These rights extend to any access required related to structural BMPs.

B) MAINTENANCE MECHANISMS

The maintenance mechanisms below apply to Port projects:

- (1) Public entity maintenance: The Port will provide stormwater BMP maintenance for its capital projects. Funding will be provided on an on-going basis through the inclusion of maintenance costs in annual operating budgets for any departments having BMP maintenance responsibility.
- (2) Lease provisions: The Port will assure stormwater BMP maintenance, repair and replacement of tenant projects through conditions in tenant leases.
- (3) Other Mechanisms: On a case by case basis, the Port may consider other mechanisms for treatment BMP maintenance such as inclusion of maintenance conditions in a use permit; or alternative mechanisms, subject to Port approval.

## C) VERIFICATION MECHANISMS

For discretionary projects, stormwater BMP maintenance requirements shall be incorporated into the project plan approval conditions, and shall be consistent with permits issued by resource agencies, before decision-maker approval of discretionary permits. For projects requiring ministerial permits, stormwater BMP maintenance requirements will be incorporated into the permit conditions before the issuance of any ministerial permits.

Sample conditions included in Project Plan Approval Letters for tenant projects are provided in Appendix D.

For capital projects requiring structural treatment BMPs, the Port will establish a method of stormwater BMP maintenance prior to the commencement of construction.

## 2.5 Waiver Of Structural Treatment BMP Requirements

The Model SUSMP and the Municipal Permit allow jurisdictions to waive requirements for implementing structural treatment BMPs on a project-specific basis if infeasibility can be established. The Port encourages all project proponents to make every attempt to comply with structural treatment BMP requirements. The Model SUSMP and Municipal Permit do not allow waivers from Site Design or Source Control BMPs and all priority projects must comply with these requirements. In addition, priority projects may not cause or contribute to any exceedance of water quality objectives and pollutants in runoff must be reduced to the MEP.

## 2.6 Alternative Methods for Achieving Treatment Requirements

In accordance with provisions of the Model SUSMP, the Port may implement the Local Equivalent Area Drainage (LEAD) Method, as proposed by the City of San Diego in its May 16, 2002 letter, for meeting the BMP requirements in Section 2.3.C, Step 8, “Design to Treatment Control BMP Standards,” for inclusion in their jurisdictional SUSMP. The alternative method must minimally meet the following criteria:

- The alternative treatment area shall be located within the proximity of the project;
- The alternative treatment area shall discharge to the same receiving water as the project;
- The alternative treatment area shall be equivalent or greater than the project footprint;

- The alternative treatment area shall have an equivalent or greater impervious surface area than the project;
- The alternative treatment area shall have an equivalent or greater pollutant load than the project;
- Site Design and Source Control BMPs (Sections 2.3.A and B) shall be required in the project design;
- Alternative treatments shall be limited to redevelopment and/or infill projects.

The Port may implement an alternative method for no more than three pilot projects within its jurisdiction during this permit cycle. For each project where an alternative method is implemented, the effectiveness of the alternative method shall be monitored and reported on to the Regional Board by the end of the permit cycle.

The Port has not identified any pilot projects for the LEAD Method at this time. Suitable projects may be identified in the future. Candidate projects for LEAD Method pilot evaluation should be brought to the attention of the Port Environmental Services Department. Interested parties should review details of the LEAD Method provided in Appendix C of the Model SUSMP ([www.swrcb.ca.gov/rwqcb9/programs/sdstormwater.html](http://www.swrcb.ca.gov/rwqcb9/programs/sdstormwater.html)).

## 2.7 Site Design Stormwater Treatment Credits

The Copermitees may develop and submit for public review and comment and Regional Board approval a regional Model Site Design Stormwater Treatment Credits program that allows reductions in the volume or flow of stormwater that must be captured or treated on a project in return for the inclusion of specified project design features in the project. The Model Site Design Stormwater Treatment Credits program shall be deemed to be a part of this Jurisdictional SUSMP following Regional Board approval. Any such model program shall specify the conditions under which project proponents can be credited for the use of site design features and low impact development techniques that can reduce the volume of stormwater runoff, preserve natural areas, and minimize the pollutant loads generated and potentially discharged from the site. Any Site Design Stormwater Treatment Credits program implemented by the Port within its jurisdiction shall be consistent and compliant with this model approved by the Regional Board.

## Appendix A

## Stormwater Best Management Practices

### A) STORMWATER BEST MANAGEMENT PRACTICES

The following are a list of BMPs may be used to minimize the introduction of pollutants of concern that may result in significant impacts to receiving waters. Other BMPs approved by the Copermittee as being equally or more effective in pollutant reduction than comparable BMPs identified below are acceptable. See Appendix B: Suggested Resources for additional sources of information. All BMPs must comply with local zoning and building codes and other applicable regulations.

#### **LID and Site Design BMPs**

##### Minimizing Impervious Areas

- Reduce sidewalk widths
- Incorporate landscaped buffer areas between sidewalks and streets.
- Design residential streets for the minimum required pavement widths
- Minimize the number of residential street cul-de-sacs and incorporate landscaped areas within cul-de-sac centers with curb-cuts to reduce their impervious cover.
- Use open space development that incorporates smaller lot sizes
- Increase building density while decreasing the building footprint
- Reduce overall lot imperviousness by promoting alternative driveway surfaces and shared driveways that connect two or more homes together
- Reduce overall imperviousness associated with parking lots by providing compact car spaces, minimizing stall dimensions, incorporating efficient parking lanes, and using pervious materials in spillover parking areas

##### Increase Rainfall Infiltration

- Use permeable materials for private sidewalks, driveways, parking lots, and interior roadway surfaces (examples: hybrid lots, parking groves, permeable overflow parking, etc.)
- Use curb-cuts to direct pavement runoff into swales, landscaping, and natural areas prior to entering the MS4.
- Direct rooftop runoff to pervious areas such as yards, open channels, or vegetated areas, and avoid routing rooftop runoff to the roadway or the urban runoff conveyance system
- Pitch driveways and parking areas toward yards and vegetated areas prior to draining into the MS4.
- Conserve and utilize natural soils and/or use amended soils to encourage light infiltration/ percolation.
- Minimize disturbances to natural drainages
- Minimize soil compaction in planned green space (landscaped areas, lawns, etc.) and re-till soils when compacted by grading/construction equipment.

##### Maximize Rainfall Interception

- Maximizing canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.
- Cisterns / Rain barrels.
- Foundation landscaping.

B) MINIMIZE DIRECTLY CONNECTED IMPERVIOUS AREAS (DCIAS)

- Draining rooftops into adjacent landscaping prior to discharging to the storm drain
- Use curb-cuts to allow parking lots to drain into landscape areas co-designed as biofiltration areas and/or swales prior to draining into the MS4
- Draining roads, sidewalks, and impervious trails into adjacent landscaping

Slope and Channel Protection

- Use of natural drainage systems to the maximum extent practicable
- Stabilized permanent channel crossings
- Planting native or drought tolerant vegetation on slopes
- Energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels

Source Control BMPs

- Storm drain system stenciling and signage
- Outdoor material and trash storage area designed to reduce or control rainfall runoff
- Efficient irrigation system

Treatment Control BMPs

- Biofilters
- Bioretention Swale (detains and infiltrates water through soil)
- Stormwater Planter Box (open-bottomed)
- Stormwater Flow-Through Planter (sealed bottom)
- Vegetated filter strip
- Bioretention Area
- Vegetated Roofs / Modules / Walls
- Detention Basins
- Extended/dry detention basin with grass/vegetated lining
- Extended/dry detention basin with impervious lining
- Infiltration basin
- Infiltration trench
- Dry well
- Permeable Paving
- Gravel
- Permeable asphalt
- Pervious concrete
- Unit pavers, ungrouted, set on sand or gravel
- Subsurface Reservoir Bed
- Wet pond (permanent pool)
- Constructed wetland
- Media filtration
- Sand filtration
- Swirl Concentrator
- Cyclone Separator
- Trash racks and screens

**Appendix B**

**Suggested Resources**

SUGGESTED RESOURCES	HOW TO GET A COPY
<p><i>The County of San Diego Low Impact Development Handbook; Stormwater Management Strategies</i> . (2007).</p> <p>Presents guidance for LID stormwater planning and management techniques. Fact Sheets on LID BMPs are provided in the Appendices.</p>	<p>The County of San Diego The Department of Planning and Land Use 5201 Ruffin Road, Suite B San Diego, CA 92123 <a href="http://www.sdcounty.ca.gov/dplu/LID_PR.html">http://www.sdcounty.ca.gov/dplu/LID_PR.html</a> <a href="http://www.sdcounty.ca.gov/dplu/">www.sdcounty.ca.gov/dplu/</a></p>
<p><i>Better Site Design: A Handbook for Changing Development Rules in Your Community</i> (1998)</p> <p>Presents guidance for different model development alternatives.</p>	<p>Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 <a href="http://www.cwp.org/PublicationStore/bsd.htm">http://www.cwp.org/PublicationStore/bsd.htm</a></p>
<p><i>California Urban runoff Best Management Practices Handbooks</i> (2003) for Construction Activity, Municipal, and Industrial/Commercial</p> <p>Presents a description of a large variety of Structural BMPs, Treatment Control, BMPs and Source Control BMPs</p>	<p>Los Angeles County Department of Public Works Cashiers Office 900 S. Fremont Avenue Alhambra, CA 91803 626-458-6959 <a href="http://www.cabmphandbooks.org">www.cabmphandbooks.org</a></p>
<p>Caltrans Urban runoff Quality Handbook: Planning and Design Staff Guide (Best Management Practices Handbooks) (1998)</p> <p>Presents guidance for design of urban runoff BMPs</p>	<p>California Department of Transportation P.O. Box 942874 Sacramento, CA 94274-0001 916-653-2975</p>
<p><i>Bioretention Manual (updated 2002)</i></p> <p>Presents guidance for designing bioretention facilities.</p>	<p>Prince George's County Watershed Protection Branch 9400 Peppercorn Place, Suite 600 Landover, MD 20785 <a href="http://www.co.pg.md.us/Government/AgencyIndex/DER/ESD/Bioretention/bioretention.asp">http://www.co.pg.md.us/Government/AgencyIndex/DER/ESD/Bioretention/bioretention.asp</a></p>
<p>Contra Costa Clean Water Program <i>Stormwater C.3 Guidebook</i></p> <p>Includes an integrated design approach to meet California Stormwater NPDES treatment and hydrograph modification management requirements using Low Impact Development site design techniques and facilities.</p>	<p>Contra Costa Clean Water Program 255 Glacier Drive Martinez, CA 94553  <a href="http://www.cccleanwater.org/construction/nd.php">www.cccleanwater.org/construction/nd.php</a></p>
<p><i>Design of Stormwater Filtering Systems</i> (1996) by Richard A. Claytor and Thomas R. Schuler</p> <p>Presents detailed engineering guidance on ten different urban runoff-filtering systems.</p>	<p>Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 <a href="http://www.cwp.org/PublicationStore/special.htm">http://www.cwp.org/PublicationStore/special.htm</a></p>
<p><i>Development Planning for Stormwater Management, A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), (May 2000)</i></p>	<p>Los Angeles County Department of Public Works <a href="http://dpw.co.la.ca.us/epd/">http://dpw.co.la.ca.us/epd/</a> or <a href="http://www.888cleanLA.com">http://www.888cleanLA.com</a></p>
<p><i>Florida Development Manual: A Guide to Sound Land and Water Management</i> (1988)</p> <p>Presents detailed guidance for designing BMPs</p>	<p>Florida Department of the Environment 2600 Blairstone Road, Mail Station 3570 Tallahassee, FL 32399</p>

SUGGESTED RESOURCES	HOW TO GET A COPY
<p><i>Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters</i> (1993) Report No. EPA-840-B-92-002.</p> <p>Provides an overview of, planning and design considerations, programmatic and regulatory aspects, maintenance considerations, and costs.</p>	<p>National Technical Information Service U.S. Department of Commerce                      Springfield, VA 22161                      800-553-6847  <a href="http://www.ntis.gov/">http://www.ntis.gov/</a></p>
<p>Guide for BMP Selection in Urban Developed Areas (2001)</p>	<p><i>ASCE Envir. and Water Res. Inst.</i>                      1801 Alexander Bell Dr.                      Reston, VA 20191-4400                      (800) 548-2723</p>
<p>Low-Impact Development Design Strategies - An Integrated Design Approach (June 1999)</p>	<p><i>Prince George's County, Maryland</i>                      Department of Environmental Resource Programs and Planning Division                      9400 Peppercorn Place                      Largo, Maryland 20774  <a href="http://www.co.pg.md.us/Government/AgencyIndex/DER/ESD/low-impact.asp?nivel=foldmenu(8)">http://www.co.pg.md.us/Government/AgencyIndex/DER/ESD/low-impact.asp?nivel=foldmenu(8)</a></p>
<p><i>Maryland Stormwater Design Manual</i> (1999)</p> <p>Presents guidance for designing urban runoff BMPs</p>	<p>Maryland Department of the Environment                      2500 Broening Highway                      Baltimore, MD 21224  <a href="http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/stormwater_design/index.asp">http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/stormwater_design/index.asp</a></p>
<p>National Stormwater Best Management Practices (BMP) Database, Version 1.0</p> <p>Provides data on performance and evaluation of urban runoff BMPs</p>	<p>American Society of Civil Engineers                      1801 Alexander Bell Drive                      Reston, VA 20191                      703-296-6000</p>
<p>National Stormwater Best Management Practices Database (2001)</p>	<p><i>Urban Water Resources Research Council of ASCE</i>  <i>Wright Water Engineers, Inc.</i>                      (303) 480-1700</p>
<p><i>Operation, Maintenance and Management of Stormwater Management</i> (1997)</p> <p>Provides a thorough look at stormwater practices including, planning and design considerations, programmatic and regulatory aspects, maintenance considerations, and costs.</p>	<p>Watershed Management Institute, Inc.                      410 White Oak Drive                      Crawfordville, FL 32327</p> <p><a href="http://stormwaterfinance.urbancenter.iupui.edu/PDFs/OMMSWM.pdf">http://stormwaterfinance.urbancenter.iupui.edu/PDFs/OMMSWM.pdf</a></p>
<p><i>Portland Stormwater Management Manual</i> (2004)</p> <p>Includes design illustrations and criteria for bioretention facilities.</p>	<p>Environmental Services                      1120 SW 5th Ave., Rm. 1000                      Portland, OR 97204                      503-823-7740</p> <p><a href="http://www.portlandonline.com/bes/index.cfm?c=35122&amp;">http://www.portlandonline.com/bes/index.cfm?c=35122&amp;</a></p>
<p>Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration</p>	<p><i>Report No. EPA/600/R-94/051, USEPA (1994).</i></p>
<p>Preliminary Data Summary of Urban runoff Best Management Practices (August 1999)</p> <p>EPA-821-R-99-012</p>	<p><a href="http://www.epa.gov/ost/stormwater/">http://www.epa.gov/ost/stormwater/</a></p>

SUGGESTED RESOURCES	HOW TO GET A COPY
Reference Guide for Stormwater Best Management Practices (July 2000)	City of Los Angeles Urban runoff Management Division 650 South Spring Street, 7 <sup>th</sup> Floor Los Angeles, California 90014 <a href="http://www.lacity.org/san/swmd/">http://www.lacity.org/san/swmd/</a>
<i>Second Nature: Adapting LA's Landscape for Sustainable Living</i> (1999) by Tree People  Detailed discussion of BMP designs presented to conserve water, improve water quality, and achieve flood protection.	Tree People 12601 Mullholland Drive Beverly Hills, CA 90210 (818) 623-4600 Fax (818) 753-4625
<i>Start at the Source</i> (1999)  Detailed discussion of permeable pavements and alternative driveway designs presented.	Bay Area Stormwater Management Agencies Association 2101 Webster Street Suite 500 Oakland, CA 510-286-1255 <a href="http://www.basmaa.org">www.basmaa.org</a>
<i>Stormwater Management in Washington State</i> (1999) Vols. 1-5  Presents detailed guidance on BMP design for new development and construction.	Department of Printing State of Washington Department of Ecology P.O. Box 798 Olympia, WA 98507-0798 360-407-7529
Stormwater, Grading and Drainage Control Code, Seattle Municipal Code Section 22.800-22.808, and Director's Rules, Volumes 1-4. (Ordinance 119965, effective July 5, 2000)	City of Seattle Department of Design, Construction & Land Use 700 5 <sup>th</sup> Avenue, Suite 1900 Seattle, WA 98104-5070 (206) 684-8880 <a href="http://www.seattle.gov/dclu/codes/default.asp">http://www.seattle.gov/dclu/codes/default.asp</a>
<i>Texas Nonpoint Source Book – Online Module</i> (1998) <a href="http://www.txnpsbook.org">www.txnpsbook.org</a>  Presents BMP design and guidance information on-line	Texas Statewide Urban Runoff Quality Task Force North Central Texas Council of Governments 616 Six Flags Drive Arlington, TX 76005 817-695-9150
<i>The Practice of Watershed Protection</i> by Thomas R. Shchuler and Heather K. Holland	Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 <a href="http://www.cwp.org/PublicationStore/practice.htm">http://www.cwp.org/PublicationStore/practice.htm</a>
<i>Urban Storm Drainage, Criteria Manual – Volume 3, Best Management Practices</i> (1999)  Presents guidance for designing BMPs	Urban Drainage and Flood Control District 2480 West 26th Avenue, Suite 156-B Denver, CO 80211 303-455-6277

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## Standard Industrial Classification (SIC) Code Information

U.S. Department of Labor Occupational Safety & Health Administration ([www.osha.gov](http://www.osha.gov))

### SIC Description for 5013

Division F: *Wholesale Trade*

Major Group 50: *Wholesale Trade-durable Goods*

Industry Group 501: *Motor Vehicles And Motor Vehicle Parts And*

5013 Motor Vehicle Supplies and New Parts

Establishments primarily engaged in the wholesale distribution of motor vehicle supplies, accessories, tools, and equipment; and new motor vehicle parts.

- Automobile engine testing equipment electrical-wholesale
- Automobile glass-wholesale
- Automobile service station equipment-wholesale
- Automotive accessories-wholesale
- Automotive engines, new-wholesale
- Automotive parts, new-wholesale
- Automotive stampings-wholesale
- Automotive supplies-wholesale
- Batteries, automotive-wholesale
- Engine electrical equipment, automotive-wholesale
- Garage service equipment-wholesale
- Hardware, automotive-wholesale
- Motorcycle parts-wholesale
- Pumps, measuring and dispensing: gasoline and oil-wholesale
- Seat belts, automotive-wholesale
- Seat covers, automotive-wholesale
- Service station equipment, automobile-wholesale
- Testing equipment, electrical: automotive-wholesale
- Tools and equipment, automotive-wholesale
- Wheels, motor vehicle: new-wholesale

### **SIC Description for 5014**

Division F: *Wholesale Trade*

Major Group 75: *Automotive Repair, Services, And Parking*

5014 Tires and Tubes

Establishments primarily engaged in the wholesale distribution of tires and tubes for passenger and commercial vehicles.

- Repair materials, tire and tube-wholesale
- Tires, used-wholesale
- Tires and tubes, new-wholesale
- Tires, used-wholesale

### **SIC Description for 5541**

Division G: *Retail Trade*

Major Group 55: *Automotive Dealers and Gasoline Service Stations*

Industry Group 554: *Gasoline Service Stations*

5541 Gasoline Service Stations

Gasoline service stations primarily engaged in selling gasoline and lubricating oils. These establishments frequently sell other merchandise, such as tires, batteries, and other automobile parts, or perform minor repair work. Gasoline stations combined with other activities, such as grocery stores, convenience stores, or carwashes, are classified according to the primary activity.

- Automobile service stations-retail
- Filling stations, gasoline-retail
- Gasoline and oil-retail
- Marine service stations-retail
- Service stations, gasoline-retail
- Truck stops-retail

### **SIC Description for 5812**

Division G: *Retail Trade*

Major Group 58: *Eating And Drinking Places*

Industry Group 581: *Eating And Drinking Places*

5812 Eating Places

Establishments primarily engaged in the retail sale of prepared food and drinks for on-premise or immediate consumption. Caterers and industrial and institutional food service establishments are also included in this industry.

- Automats (eating places)
- Beaneries
- Box lunch stands
- Buffets (eating places)
- Cafes
- Cafeterias
- Carry-out restaurants
- Caterers
- Coffee shops
- Commissary restaurants
- Concession stands, prepared food (e.g., in airports and sports arenas)
- Contract feeding
- Dairy bars
- Diners (eating places)
- Dining rooms
- Dinner theaters
- Drive-in restaurants
- Fast food restaurants
- Food bars
- Food service, institutional
- Frozen custard stands
- Grills (eating places)
- Hamburger stands
- Hot dog (frankfurter) stands
- Ice cream stands
- Industrial feeding
- Lunch bars
- Lunch counters
- Luncheonettes
- Lunchrooms
- Oyster bars
- Pizza parlors
- Pizzerias
- Refreshment stands
- Restaurants
- Restaurants, carry-out
- Restaurants, fast food
- Sandwich bars or shops
- Snack shops
- Soda fountains
- Soft drink stands
- Submarine sandwich shops
- Tea rooms
- Theaters, dinner

## **SIC Description for 7532**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, and Parking*

Industry Group 753: *Automotive Repair Shops*

7532 Top, Body, and Upholstery Repair Shops and Paint Shops

Establishments primarily engaged in the repair of automotive tops, bodies, and interiors, or automotive painting and refinishing. Also included in this industry are establishments primarily engaged in customizing automobiles, trucks, and vans except on a factory basis. Establishments primarily engaged in customizing automobiles, trucks, and vans on a factory basis are classified in Manufacturing, Industry Group 371.

- Antique and classic automobile restoration
- Automotive body shops
- Automotive interior shops
- Automotive paint shops
- Automotive tops (canvas or plastic), installation, repair, or sales and
- Automotive trim shops
- Bump shops (automotive repair)
- Collision shops, automotive
- Customizing automobiles, trucks or vans: except on a factory basis
- Upholstery repair, automotive
- Van conversions, except on a factory basis

## **SIC Description for 7533**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, and Parking*

Industry Group 753: *Automotive Repair Shops*

7533 Automotive Exhaust System Repair Shops

Establishments primarily engaged in the installation, repair, or sale and installation of automotive exhaust systems. The sale of mufflers, tail pipes, and catalytic converters is considered to be incidental to the installation of these products.

- Catalytic converters, automotive: installation, repair, or sales and

- Exhaust system services, automotive
- Mufflers, automotive: installation, repair, or sales and installation

### **SIC Description for 7534**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, And Parking*

Industry Group 753: *Automotive Repair Shops*

7534 Tire Retreading and Repair Shops

Establishments primarily engaged in repairing and retreading automotive tires. Establishments classified here may either retread customers' tires or retread tires for sale or exchange to the user or the trade.

- Rebuilding and retreading tires for the trade
- Retreading tires
- Tire recapping
- Tire repair shops
- Tire studding and restudding
- Vulcanizing tires and tubes

### **SIC Description for 7536**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, And Parking*

Industry Group 753: *Automotive Repair Shops*

7536 Automotive Glass Replacement Shops

Establishments primarily engaged in the installation, repair, or sales and installation of automotive glass. The sale of the glass is considered incidental to the replacement.

- Glass replacement and repair, automotive

### **SIC Description for 7537**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, And Parking*

Industry Group 753: *Automotive Repair Shops*

### 7537 Automotive Transmission Repair Shops

Establishments primarily engaged in the installation, repair, or sales and installation of automotive transmissions. The sale of transmissions and related parts is considered incidental to the installation or repair of these products.

- Automatic transmission repair, automotive
- Transmission repair, automotive
- Transmission, automotive: installation, repair, or sale and installation

### **SIC Description for 7538**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, And Parking*

Industry Group 753: *Automotive Repair Shops*

### 7538 General Automotive Repair Shops

Establishments primarily engaged in general automotive repair. Establishments primarily engaged in industrial truck repair are classified in Industry 7699.

- Automotive repair shops, general
- Diesel engine repair, automotive
- Engine repair, automotive
- Engine repair, truck: except industrial
- Garages, general automotive repair and service
- Motor repair, automotive
- Truck engine repair, except industrial

### **SIC Description for 7539**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, And Parking*

Industry Group 753: *Automotive Repair Shops*

### 7539 Automotive Repair Shops, Not Elsewhere Classified

Establishments primarily engaged in specialized automotive repair, not elsewhere classified, such as fuel service (carburetor repair), brake relining, front-end and wheel alignment, and radiator repair. Establishments primarily engaged in automotive welding are classified in Industry 7692.

- Air-conditioner repair, automotive
- Automotive springs, rebuilding and repair
- Axle straightening, automotive
- Brake linings, sale and installation
- Brake repairing, automotive
- Carburetor repair
- Electrical service, automotive (battery and ignition repair)
- Frame repair shops, automotive
- Front end repair, automotive
- Fuel system conversion, automotive
- Fuel system repair, automotive
- Generator and starter repair, automotive
- Radiator repair shops, automotive
- Wheel alignment, automotive

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**Tenant Improvement Projects – POST-CONSTRUCTION / OPERATIONAL PHASE  
STORMWATER CONDITIONS**

**CONDITION OF APPROVAL # 1:**

The following statement shall be added to Project Plan Approval Letter for all tenant projects:

“All Port tidelands are regulated under Regional Water Quality Control Board Order No. R9-2007-0001, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District (Municipal Permit), as adopted, amended, and/or modified. The Municipal Permit prohibits any activities that could degrade stormwater quality. Post-construction / operational use of this project site must comply with the Municipal Permit and District direction related to permitted activities including the requirements found in the District Jurisdictional Urban Runoff Management Document (JURMP). The JURMP is available on the District website: ([http://www.portofsandiego.org/sandiego\\_environment/jurmp.asp](http://www.portofsandiego.org/sandiego_environment/jurmp.asp)) or by contacting the District Recreation and Environmental Services Department, (619) 686-6254.

No discharges of any material or waste, including potable water, wash water, dust, soil, trash and debris, may contaminate stormwater or enter the stormwater conveyance system. Any such material that inadvertently contaminates stormwater or enters the stormwater conveyance system as part of site operations must be removed immediately. All unauthorized discharges to the stormwater conveyance system or the Bay or the ocean must be reported immediately to the Recreation and Environmental Services Department, in order to address any regulatory permit requirements regarding spill notifications.

Best management practices (BMPs) must be implemented by the Tenant to control the potential release of any materials or wastes being handled or stored on-site which could enter the stormwater conveyance system due to wind or stormwater runoff.

In addition, this project is subject to the Port Standard Urban Stormwater Mitigation Plan (SUSMP) process. As such, approval of the project by the District is necessarily conditioned upon submission by the project proponent of a project specific urban Stormwater Mitigation Plan (USMP) that meets District requirements. Project approval requires full implementation of all USMP structural and non-structural BMPs throughout the life of the project. The implementation and

maintenance of the USMP BMPs constitute regulatory obligations for the leasee, and failure to comply with the Municipal Permit, the JURMP, or the Port approved USMP, including the specific BMPs contained therein, may be considered a default under the lease.