

STORMWATER MANAGEMENT PROGRAM PLAN FOR PHASE I PROPERTIES (PERMIT NO. WAR044701)



May 2018

Port of Seattle Stormwater Management Program Plan For Phase I Properties

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List of Acronyms and Abbreviations

Alliance	Northwest Seaport Alliance
BMP	Best Management Practice
CESCL	Certified Erosion and Sediment Control Lead
City	City of Seattle
Ecology	Washington State Department of Ecology
EPA	(U.S.) Environmental Protection Agency
IDDE	Illicit Discharge Detection and Elimination
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
Permit	Phase I Municipal Stormwater Permit
Port	Port of Seattle
SAM	Stormwater Action Monitoring
SWMMWW	Stormwater Management Manual for Western Washington
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load

Port of Seattle Stormwater Management Program Plan For Phase I Properties Updated May 2018

Introduction

The Port of Seattle (Port) Maritime and Economic Development divisions produced this Stormwater Management Program (SWMP) Plan to demonstrate compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Stormwater Permit (Permit) modified on August 19, 2016 by the Washington State Department of Ecology (Ecology). The Port's SWMP Plan provides an overview of the Port's activities related to stormwater management on Maritime and Economic Development division properties covered by the Permit (Phase I Properties), located within the City of Seattle (City) and unincorporated King County.

Port Overview

The Port has jurisdiction over approximately 1,500 acres of facilities and other areas along Seattle's waterfront including marine terminals, marinas, rail lines, parks, and shoreline public access areas (Figure 1). Of these 1,500 acres, approximately 1,100 acres of land are covered under the Permit, as well as multiple other NPDES stormwater permits. The remaining acreage consists of Department of Natural Resources lands, aquatic areas, and small shoreline areas where no development has occurred. In total, approximately 1,000 acres of Port land are impervious surfaces. The Port's water-dependent facilities and activities are a substantial base of economic activity and employment within the City, the Port district, and the State of Washington.

The Port is a publicly owned and operated municipal corporation authorized by state law to plan, construct, operate, and maintain harbor improvements within the Port district. Specifically, the Port provides marine services and cargo and passenger terminals for large vessels, serving diverse marine transportation businesses. The Port also provides facilities for all elements of the fishing industry, other water-dependent and water-related commercial and industrial uses, and recreational boats, including facilities at Fishermen's Terminal, the Maritime Industrial Center, Harbor Island Marina, Shilshole Bay Marina, and Bell Harbor Marina.

In 2015, the Northwest Seaport Alliance (Alliance) was formed to improve the efficiency of managing container cargo facilities located on Port of Seattle and Port of Tacoma properties. The Alliance functions as a property manager on Port properties in the Lower Duwamish Waterway and North Harbor (Figure 2); however, the Permit responsibilities still rest with the Port.

In 2014, the Port adopted a resolution establishing a Stormwater Utility (SWU) to fund, operate, and rehabilitate the Port's stormwater systems. In 2016, the SWU began collecting drainage fees from tenants, property managers, and owners, which are used to provide services, facilities, systems, and programs for surface water and stormwater management and pollution control.

The Port implements significant environmental restoration, cleanup, and habitat enhancement as part of its capital improvement programs and ongoing operations and management of Port facilities. The Port created 20 public shoreline access points where residents and visitors can see firsthand the City's maritime environment and economy.

Permit Overview

The NPDES program is a requirement of the Federal Clean Water Act. The Environmental Protection Agency (EPA) has delegated NPDES administration authority in Washington State to Ecology. On August 1, 2012, Ecology reissued the updated 2013-2018 NPDES Permit, which became effective on August 1, 2013. There have been two modifications: the first on December 17, 2014, which went into effect on January 16, 2015; and the second on July 20, 2016, which went into effect on August 19, 2016. The current (2013-2018) Western Washington permit has been extended one year. The permit will be reissued on July 1, 2019, and become effective on August 1, 2019. The Port (excluding Seattle-Tacoma International Airport) has been designated as a Secondary Permittee with coverage under the Permit.

The Permit authorizes the discharge of stormwater from the Port's municipal separate storm sewer system (MS4) to surface waters and ground waters of the state. The Port must develop and implement a SWMP for Phase I Properties that is designed to protect water quality and reduce the discharge of pollutants from the Port's MS4 to the maximum extent practicable, as defined by the Permit.

The Permit requires the Port to prepare written documentation of the SWMP for Phase I Properties, called the SWMP Plan, which includes descriptions of planned SWMP activities for the upcoming calendar year. Each year, the Port shall make the latest updated version of the SWMP Plan available on the Port's website. In addition, the Permit requires the Port to submit annual reports electronically by March 31 of each year to document the progress toward implementing the SWMP components on Phase I Properties throughout the prior calendar year.

SWMP Plan Organization

The Port intends to maintain compliance with the Permit by continuing to implement a suite of Best Management Practices (BMPs) on Phase I Properties. A stormwater BMP is defined as any program, technology, process, siting criterion, operating method, measure, or device that controls,

removes, or reduces pollution. The SWMP Plan is organized to demonstrate compliance with the Permit requirements, with current and proposed BMPs grouped into the following program components required by the Permit:

- Section 1 Education Program (S6.E.1)
- Section 2 Public Involvement and Participation (S6.E.2)
- Section 3 Illicit Discharge Detection and Elimination (S6.E.3)
- Section 4 Construction Site Stormwater Runoff Control (S6.E.4)
- Section 5 Post-Construction Stormwater Management for New Development and Redevelopment (S6.E.5)
- Section 6 Operation and Maintenance Program (S6.E.6)
- Section 7 Source Control in Existing Developed Areas (S6.E.7)
- Section 8 Total Maximum Daily Load Requirements (S7)
- Section 9 Monitoring and Assessment (S8)
- Section 10 Reporting Requirements (S9)

Each section includes a table that summarizes the relevant Permit requirements and the corresponding planned and ongoing compliance activities for the upcoming calendar year.

Introduction Continued

Education Program (S6.E.I)

Table 1 summarizes the requirements of Permit Special Condition S6.E.1, and outlines the corresponding activities at the Port related to the Education Program.

Permit Requirements	Planned and Ongoing Activities
Include an education program aimed at tenants and Port employees. Make educational materials available to tenants and Port employees whose job duties could impact stormwater.	 Conduct training for Port employees covering Stormwater Management, Onsite Stormwater Management, and illicit discharge, detection, and elimination (IDDE) to increase understanding of stormwater issues at the Port and reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. Conduct outreach activities for tenants to increase understanding of stormwater issues at the Port and reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater issues at the Port and reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.
	• Maintain stormwater-related website specific to Maritime issues, including a resource page with educational materials for tenants and the public to learn more about stormwater.
	Post stormwater management information on the Port's website.Update website with educational information.

Table 1. Education Program

The Port is maintaining the following stormwater-related websites:

- Port of Seattle Maritime Stormwater Utility Program Website:
- <u>https://www.portseattle.org/programs/maritime-stormwater-utility-program</u> Port of Seattle – Maritime Stormwater Tenant Information Website:

https://www.portseattle.org/page/maritime-stormwater-tenant-information

Section I—Education Program (S6.E.I)

Section 2—Public Involvement and Participation (S6.E.2)

Public Involvement and Participation (S6.E.2)

Table 2 summarizes the requirements of Permit Special Condition S6.E.2, and outlines the corresponding activities at the Port related to Public Involvement and Participation.

Permit Requirements	Planned and Ongoing Activities
Make the latest updated version of the SWMP	• Each year, the Port will post the latest version of the SWMP Plan
Plan and Annual Report available to the public.	and Annual Report on the Port's website.
The most recent SWMP Plan and Annual Report	
shall be posted on the Port's website.	

Table 2. Public Involvement and Participation

The Port is maintaining the following stormwater-related website:

• Port of Seattle – Maritime Stormwater Utility Program Website:

https://www.portseattle.org/programs/maritime-stormwater-utility-program

Section 2—Public Involvement and Participation (S6.E.2) Continued

Section 3—Illicit Discharge Detection and Elimination (S6.E.3)

Illicit Discharge Detection and Elimination (S6.E.3)

Table 3 summarizes the requirements of Permit Special Condition S6.E.3, and outlines the corresponding activities at the Port related to Illicit Discharge Detection and Elimination (IDDE).

Permit Requirements	Planned and Ongoing Activities		
Include a program in the SWMP to identify, detect, remove, and prevent illicit connections and illicit discharges, including spills, into the MS4s owned and operated by the Port.	 Maintain written documentation of the IDDE Program to document IDDE policies, enforcement mechanisms, field inspection procedures, and spill response plan. Implement the activities and BMPs listed in this table in accordance with S6.E.3.a through S6.E.3.f of the Permit. 		
Comply with all relevant ordinances, rules, and regulations of the local jurisdiction in which the Port's MS4 is located that govern non-stormwater discharges.	 Verify that Port activities on Phase I Properties comply with City ordinances, rules, and regulations that govern non-stormwater discharges. 		
Implement appropriate policies prohibiting illicit discharges and an enforcement plan to ensure compliance with illicit discharge policies.	• Continue to enforce the IDDE Policy adopted by the Port Commissioners that prohibits illicit discharges, non-stormwater discharges (including spills of hazardous materials), illicit connections, improper disposal of pet waste and litter, and illegal dumping.		
	• Implement IDDE policies, enforcement mechanisms, and field inspection procedures described in the Port IDDE Guidance Manual. The manual identifies appropriate policies to prohibit illicit discharges and includes an enforcement plan to ensure compliance with the Port's policies.		
	• Update the Port's IDDE Policy and IDDE Guidance Manual as necessary.		

Table 3. Illicit Discharge Detection and Elimination

Section 3—Illicit Discharge Detection and Elimination (S6.E.3)

Permit Requirements	Planned and Ongoing Activities			
Implement an ongoing program to gather, maintain, and use adequate information to conduct planning, priority setting, and program evaluation activities for Port-owned properties, including mapping data for:	 Collect field and mapping data for the Port's MS4. Maintain mapping for all known MS4 outfalls, receiving waters, and land uses for property owned by the Port as information becomes known. 			
• Known MS4 outfalls and discharge points, receiving waters, and land uses for Port-owned properties and all properties served by the Port's MS4.	• Maintain mapping for tributary conveyances (including size, material, and type attributes where known), and the associated drainage areas of MS4 outfalls with a 12-inch nominal diameter or greater.			
• Tributary conveyances and the associated drainage areas of MS4 outfalls and discharge points with a 24-inch nominal diameter or	• Maintain mapping for known connections greater than or equal to 8 inches in nominal diameter to tributary conveyances mapped in accordance with the Permit.			
greater. No later than December 31, 2017, each Permittee shall complete this requirement	• Maintain drainage basin boundaries for tributary systems.			
for all MS4 outfalls and discharge points with a 12-inch nominal diameter or larger.	 Maintain appropriate maps and reports to meet Ecology formatting requirements. 			
• Known connections greater than or equal to 8 inches in nominal diameter to mapped tributary conveyances. The mapping shall be completed no later than December 31, 2017.	• Maintain land use maps of Phase I Properties.			
Implement a program to document Operation and Maintenance (OざM) records for stormwater	• Maintain Maximo database developed to track maintenance related activities.			
treatment and flow control BMPs/facilities and catch basins.	• Maintain stormwater facility inventory based on construction plans, staff knowledge, and field visits.			
	• Maintain inventory data in O&M database and track O&M actions.			
	• Create annual O&M reports.			
	• Make reports available to Ecology upon request.			
To the extent consistent with national security laws and directives, make available to Ecology and/or	• Maintain compliance with Port security policies related to infrastructure information sharing.			
the City or King County, upon request, mapping information and O&M records.	• If allowable, make mapping data and/or O&M records available to Ecology, the City, or King County upon request.			

Section 3—Illicit Discharge Detection and Elimination (S6.E.3)

Permit Requirements	Planned and Ongoing Activities		
Conduct field screening of at least 20% of the MS4 each year for the purpose of detecting illicit discharges and illicit connections.	• Conduct field screenings in accordance with the schedule and methodologies described in the Port's IDDE Guidance Manual t meet the annual 20% field screening requirement.		
	• Use inspection forms included in the Port's IDDE Guidance Manual to document inspections and follow-up activities.		
	• Refer problems encountered to appropriate Port staff for follow- up, as outlined in the Port's IDDE Guidance Manual.		
	• Maintain field screening records.		
Implement procedures to identify and remove any illicit discharges or connections. Keep records of inspections and follom-up activities.	• Continue to implement field screening, inspection, and enforcement procedures described in the Port's IDDE Guidance Manual to identify and remove illicit discharges and illicit connections.		
	• Investigate suspected illicit discharge problem areas to determine if outflows are from receding tidal water, groundwater, or a legitimate illicit discharge.		
	• Maintain records of inspections and follow-up activities.		
Implement a spill response plan that includes coordination with a qualified spill responder.	 Update spill response plan as necessary. Maintain list of qualified spill responders. Follow spill response procedures described in the Port's IDDE Guidance Manual. 		
Provide ongoing staff training or coordinate with existing training efforts to educate relevant staff on proper BMPs for preventing spills and illicit discharges, and responding as appropriate. Keep training records.	 Coordinate with education efforts in Section 1 to train appropriate Port staff. Maintain records of training provided and staff trained. 		

Section 4—Construction Site Stormwater Runoff Control (S6.E.4)

Construction Site Stormwater Runoff Control (S6.E.4)

Table 4 summarizes the requirements of Permit Special Condition S6.E.4, and outlines the corresponding activities at the Port related to Construction Site Stormwater Runoff Control.

Permit Requirements	Planned and Ongoing Activities			
Include a program in the SWMP to reduce pollutants in stormwater runoff from construction activities under functional control of the Port.	 Implement the activities and BMPs listed in this table in accordance with S6.E.4.a through S6.E.4.e of the Permit. As necessary, update Master Specifications (Section 01 57 13), which include temporary erosion and sediment control guidelines for construction projects. 			
Comply with all relevant rules and regulations of the local jurisdiction that govern construction phase stormwater pollution prevention. To the extent allowed by local ordinances, comply with the applicable minimum technical requirements for new development and redevelopment.	 Follow the Port's Stormwater Design Review procedures for Port new development and redevelopment projects conducted on Phase I Properties that drain to the Port's MS4. Port new development and redevelopment projects that discharge to the City's MS4 will be referred to the City for Drainage Control Review. Continue to implement the City's relevant ordinances, rules and regulations that govern construction site runoff. 			
Ensure that all construction projects under the functional control of the Port obtain coverage under the General NPDES Permit for Stormwater Discharges Associated with Construction Activities, if required.	 If required, apply for Construction Stormwater Permit coverage for Port projects on Phase I Properties prior to construction activity. Refer tenant projects to the City and Ecology for permit coverage, if required. 			
Coordinate with local jurisdiction regarding projects owned or operated by other entities that discharge into the Port's MS4 to assist local jurisdiction with achieving compliance.	Coordinate with the City as applicable.			
Provide staff training or coordinate with existing training efforts to educate Port staff responsible for implementing construction stormwater erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.	 Maintain Certified Erosion and Sediment Control Lead (CESCL) certification (from an Ecology approved resource) for Port staff or consultant staff representatives responsible for construction sites. Require construction contractors responsible for erosion control to have CESCL certification. 			

Table 4.	Construction	Site	Stormwater	Runoff	Control
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Section 4—Construction Site Stormwater Runoff Control (S6.E.4)

Permit Requirements	Planned and Ongoing Activities	
As requested, provide Ecology or the local jurisdiction access for inspection of construction sites or land disturbances under the functional control of the Port during active land disturbing activities and/or the construction period.	 Review legal authority and potential mechanisms to allow inspections, as required. Provide access as requested and legally allowable. 	

Section 5—Post-Construction Stormwater Management for New Development and Redevelopment (S6.E.5)

Post-Construction Stormwater Management for New Development and Redevelopment (S6.E.5)

Table 5 summarizes the requirements of Permit Special Condition S6.E.5, and outlines the corresponding activities at the Port related to Post-Construction Stormwater Management for New Development and Redevelopment.

Permit Requirements	Planned and Ongoing Activities	
Include a program in the SWMP to address post- construction stormwater runoff from new development and redevelopment projects.	 Implement the activities and BMPs listed in this table in accordance with S6.E.5.a and S6.E.5.b of the Permit. As necessary, update the Port's design review procedures for new development and redevelopment. 	
Comply with all relevant ordinances, rules and regulations of the local jurisdiction that govern post- construction stormwater pollution prevention measures, including proper operation and maintenance of the MS4. To the extent allowed by local ordinances, comply with the applicable minimum technical requirements for new development and redevelopment.	 Follow the Port's Stormwater Design Review procedures for Port new development and redevelopment projects conducted on Phase I Properties that drain to the Port's MS4. Port new development and redevelopment projects that discharge to the City's MS4 will be referred to the City for Drainage Control Review. Follow the Port's Operations and Maintenance (O&M) Manual, developed according to the requirements described in Permit Special Condition S6.E.6. Continue to implement the City's relevant ordinances, rules and regulations that govern post-construction stormwater management for new development and redevelopment. 	
Coordinate with local jurisdiction regarding projects owned and operated by other entities that discharge into the Port's MS4.	Coordinate with the City as applicable.	

Table 5. Post-Construction Stormwater Management for New Development and Redevelopment

Section 5—Post-Construction Stormwater Management for New Development and Redevelopment (S6.E.5) Continued

Section 6—Operation and Maintenance Program (S6.E.6)

Operation and Maintenance Program (S6.E.6)

Table 6 summarizes the requirements of Permit Special Condition S6.E.6, and outlines the corresponding activities at the Port related to the Operation and Maintenance (O&M) Program.

Permit Requirements	Planned and Ongoing Activities	
Include an O&M program in the SWMP for all stormwater treatment and flow control BMPs/	• Implement the activities and BMPs listed in this table in accordance with S6.E.6.a through S6.E.6.d of the Permit.	
facilities and catch basins.	Continue to conduct O&M activities including:	
	• Parking lot and street sweeping.	
	 Inspections and cleaning for catch basins and other stormwater structures. 	
	 Routine maintenance of stormwater treatment facilities and other structural BMPs. 	
	 Inspection of suspected problems at stormwater treatment facilities and other structural BMPs. 	
	• Tracking maintenance activities in the Port's Maximo database.	
Implement an O&M manual for all stormwater treatment and flow control BMPs/facilities and catch basins under the functional control of the Port that discharge to the Port's MS4 or an interconnected MS4. Retain a copy of the manual in the appropriate Port department and update as necessary.	• Document stormwater facilities on Phase I Properties under the Port's functional control.	
	• Follow the O&M procedures and activities described in the Port's O&M Manual.	
	• Retain copies of the O&M Manual at the Port Marine Maintenance facilities and Environmental Department.	
Establish facility-specific maintenance standards within the O&M manual that are at least as	• Review maintenance standards in Chapter 4 of Volume V of the SWMMWW and City Stormwater Manual.	
protective as those in the Ecology Stormwater Management Manual for Western Washington (SWMMWW) to determine if maintenance is required. As necessary, update maintenance standards no later than July 1, 2016.	• O&M Manual updated in May 2016.	
	• Update O&M Manual to be consistent with the SWMMWW and City Stormwater Manual as necessary.	

Table 6. Operation and Maintenance Program
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Section 6—Operation and Maintenance Program (S6.E.6)

Permit Requirements	Planned and Ongoing Activities	
Manage maintenance activities to inspect all facilities listed in the O&M manual annually, and	• Follow the facility inspection schedule established in the Port's O&M Manual.	
take appropriate maintenance action in accordance with the OぐM manual.	• Use the Maintenance Standards and Inspection Checklists presented in the Port's O&M Manual to document inspections.	
	• Train staff on facility inspections.	
	• Allocate staff resources to facility inspections.	
	• Prepare inspection reports to document all inspection activities.	
Take appropriate maintenance action when the maintenance standard is exceeded. Maintenance shall be performed within the timeline identified in permit condition S6.E.6.b(ii).	• Use Maintenance Standards and Inspection Checklist documents provided in the Port's O&M Manual to determine when a maintenance standard has been exceeded.	
	• Prepare maintenance requests and conduct maintenance activities as needed.	
	• Maintain records.	
Provide appropriate training for Port maintenance staff.	Conduct annual training for Port maintenance staff.	
	• Identify maintenance staff that require training.	
	• Create and update resources for internal trainings – videos, webcasts, handouts, etc. Ensure maintenance staff are aware of these resources.	
	• Provide safety information in the Marine Maintenance Job Hazard Analysis located on the Marine Maintenance SharePoint site.	
Maintain records of inspections and maintenance activities.	• Maintain maintenance records in the Maximo database, including inspection checklists, field notes, or work orders, for at least 5 years.	

Section 7—Source Control in Existing Developed Areas (S6.E.7)

Source Control in Existing Developed Areas (S6.E.7)

Table 7 summarizes the requirements of Permit Special Condition S6.E.7, and outlines the corresponding activities at the Port related to Source Control in Existing Developed Areas.

Permit Requirements	Planned and Ongoing Activities	
Develop and implement one or more Stormwater Pollution Prevention Plans (SWPPPs) to identify and implement measures to prevent and control the contamination of discharges of stormwater to surface or ground water.	 Maintain a list of sites covered by the Permit, and all other NPDES Permits (general, individual, industrial, etc.) Implement the activities and BMPs in accordance with S6.E.7.a through S6.E.7.g of the Permit. 	
Prepare and implement SWPPPs as required under the Permit, and update as necessary to reflect changes at the facility.	 Develop and/or maintain SWPPPs for Port-controlled Phase I Properties, updating as necessary. Work with tenants to develop SWPPPs for tenant-controlled Phase I properties. Update tenant SWPPP template as necessary. 	
SWPPP(s) shall include a facility assessment with a site plan, identification of pollutant sources, and description of drainage system.	 Maintain list of sites that must be covered by a SWPPP required under the Permit. Conduct site inspections to collect data for the facility assessment. Prepare a facility assessment for each site including site plan, identification of pollutant sources, and description of drainage system. 	
Describe source control BMPs, selected from the Stormwater Management Manual for Western Washington (SWMMWW), used or proposed for use. Implement non-structural BMPs immediately following SWPPP development. Where necessary, include schedule for implementing structural BMPs in the SWPPP.	 Identify additional source control BMPs for new or updated SWPPPs. Identify structural and non-structural BMPs already in place for new or updated SWPPPs. Where necessary, develop an implementation schedule for structural BMPs for new or updated SWPPPs. 	

Table 7. Source Control in Existing Developed Areas

Section 7—Source Control in Existing Developed Areas (S6.E.7) Continued

Permit Requirements	Planned and Ongoing Activities	
Maintain a list of sites covered by the SWPPP(s) required under the Permit. Inspect at least 20% of	• Maintain a list of sites covered by a SWPPP required under the Permit.	
nsiea sues annualty.	• Develop an inspection schedule based on the list of sites with SWPPP coverage to ensure that at least 20% of the listed sites are inspected annually.	
	• Conduct site inspections to the extent allowed by local ordinances, rules, and regulations.	
Include policies and procedures to reduce pollutants associated with pesticides, herbicides, and fertilizer.	• Update Port maintenance policy prohibiting the use of pesticides and herbicides, as needed.	
Include measures to prevent, identify, and respond to illicit discharges, illicit connections, spills, and	• Include reference to the Port's IDDE Program in SWPPPs.	
improper disposal. Notify the City or King County and Ecology upon becoming aware of a spill	• Implement Port's IDDE Program on all Phase I Properties.	
una Ecology upon occoming aware of a spin.	• Notify the City or King County and Ecology of spills as needed.	
Include a component related to inspection and maintenance of stormwater facilities and catch basins that is consistent with the Port's OざM	 Include reference to the Port's O&M Program in Port SWPPPs. Implement Port O&M Program on Phase I Properties 	
Program.	impendent fort over i rograni on rinase i rioperites.	

Section 8—Total Maximum Daily Load Requirements (S7)

Total Maximum Daily Load Requirements (S7)

The Total Maximum Daily Load (TMDL) requirements only apply if a stormwater TMDL has been established for waters of the state that receive stormwater discharges from the stormwater system on Phase I Properties owned or operated by the Port. The applicable TMDLs that require additional compliance activities are listed in Appendix 2 of the Permit. At the time of publication, none of the TMDLs listed in Appendix 2 affect the Port. As such, no additional activities are required for compliance with TMDL conditions. The Port will continue to track the development of TMDLs and participate in their development and implementation, when appropriate.

Section 8—Total Maximum Daily Load Requirements (S7) Continued

Section 9—Monitoring and Assessment (S8)

Monitoring and Assessment (S8)

Table 8 summarizes the requirements of Permit Special Condition S8, and outlines the corresponding activities at the Port related to Monitoring and Assessment.

Permit Requirements	Planned and Ongoing Activities	
In each annual report, the Port shall provide a description of any stormwater monitoring or stormwater-related studies conducted by the Port during the reporting period.	• The Permit states that the Port is not required to provide descriptions of any monitoring, studies, or analyses conducted as part of the Stormwater Action Monitoring (SAM) program. However, if any additional stormwater monitoring or stormwater- related studies not related to the SAM program are conducted at the Port or on behalf of the Port, the Port will provide a description of these activities in the annual report of the given reporting period.	
No later than October 15, 2013, the Port shall notify Ecology in writing which of the two options presented in the Permit for status and trends monitoring the Port chooses to carry out. The single option selected will be for the duration of the permit term.	• The Port selected Status and Trends Monitoring Option #1, presented in section S8.B.1.a of the Permit, and submitted this selection in writing to Ecology prior to October 15, 2013, along with the first payment of \$5,000. This option requires the Port to pay into a collective fund to implement SAM small streams and marine nearshore status and trends monitoring in Puget Sound. The Port will continue to make subsequent annual payments of \$4,151 beginning August 15, 2014.	
No later than December 1, 2013, the Port shall notify Ecology in writing which of the three options presented in the Permit for stormwater management effectiveness studies the Port chooses to carry out. The single option selected will be for the duration of the permit term.	• The Port selected Effectiveness Studies Option #1, presented in section S8.C.1 of the Permit, and submitted this selection in writing to Ecology prior to December 1, 2013. This option requires the Port to pay into a collective fund to implement SAM effectiveness studies. The Port will continue to make annual payments of \$6,916 beginning August 15, 2014.	
The Port shall pay into a collective fund to implement the SAM Source Identification Information Repository (SIDIR) for source identification and diagnostic monitoring.	• The Port will continue to pay an annual fee of \$641 into the SAM SIDIR collective fund. The payments are due to Ecology annually beginning August 15, 2014.	

Table 8. Monitoring and Assessment

Section 9—Monitoring and Assessment (S8) Continued

Reporting Requirements (S9)

Table 9 summarizes the requirements of Permit Special Condition S9, and outlines the corresponding activities at the Port related to Reporting Requirements.

Permit Requirements	Planned and Ongoing Activities	
No later than March 31 of each year beginning in 2015, the Port shall prepare and submit an annual report to Ecology covering the previous calendar year. The annual report shall include the information outlined in Permit condition S9.E. The reports must be submitted electronically using Ecology's Water Quality Permitting Portal (WQWebPortal) available on Ecology's website. The annual report will describe the status of implementation of the requirements of this Permit during the reporting period.	 Prepare and maintain the SWMP Plan document outlining planned activities to meet Permit requirements. Prepare and submit an annual report. Collect and maintain data and information, as necessary and identified within the Permit, to attach to the annual report to be submitted each year. 	
Keep all records related to the Permit and the SWMP for at least five years.	Maintain database for collecting and consolidating SWMP records.Review records annually as part of annual report development.	
Make records related to this permit and the Permittee's SWMP available to the public at reasonable times during business hours. Provide a copy of the most recent annual report to any individual entity, upon request.	 Maintain Permit and SWMP documents. Post documents or information about document availability on the Port's Stormwater website. Provide copies of the most recent annual report as requested. 	

Table 9. Reporting Requirements

Section 10—Reporting Requirements (S9) Continued

FIGURES



Figure 1: Port of Seattle Maritime Properties





DISCLAIMER: The information included on this map has been compiled by Port of Seattle staff from a variety of sources and is subject to change without notice. These data are intended for informational purposes and should not be considered authoritative for engineering, navigational, lega and other site-specific uses. The Port of Seattle makes no representations or waranties, express or implied, as to accuracy, completeness, timeliness, or rights the use of such information.

Data Credits:

Street data from King County | Building data from City of Seattle | All other data from Port of Seattle Author: Devlin Donnelly

Map Date: 4/23/2015

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APPENDIX A

Phase I Municipal Stormwater Permit, selected sections

- b. Each permittee shall create stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities such as stream teams, storm drain marking, volunteer monitoring, riparian plantings and education activities.
- c. Each Permittee shall measure the understanding and adoption of the targeted behaviors for at least one targeted audience in at least one subject area. No later than February 2, 2016, Permittees shall use the resulting measurements to direct education and outreach resources most effectively as well as to evaluate changes in adoption of the targeted behaviors. Permittees may meet this requirement individually or as a member of a regional group.

S6. STORMWATER MANAGEMENT PROGRAM FOR SECONDARY PERMITTEES

A. This section applies to all Secondary Permittees and all New Secondary Permittees whether coverage under this Permit is obtained individually, or as a Co-Permittee with a city, town, county, and/or another Secondary Permittee.

New Secondary Permittees subject to this Permit shall fully meet the requirements of this section as modified in footnotes in S6.D below, or as established as a condition of coverage by Ecology.

- 1. To the extent allowable under state, federal and local law, all components are mandatory for each Secondary Permittee covered under this permit, whether covered as an individual Permittee or as a Co-Permittee.
- 2. Each Secondary Permittee shall develop and implement a stormwater management program (SWMP). A SWMP is a set of actions and activities comprising the components listed in S6 and any additional actions necessary to meet the requirements of applicable TMDLs pursuant to S7 Compliance with TMDL Requirements, and S8 Monitoring and Assessment. The SWMP shall be designed to reduce the discharge of pollutants from MS4s to the maximum extent practicable (MEP) and protect water quality.
- 3. Unless an alternate implementation schedule is established by Ecology as a condition of permit coverage, the SWMP shall be developed and implemented in accordance with the schedules contained in this section and shall be fully developed and implemented no later than four and one-half years from initial permit coverage date. Secondary Permittees that are already implementing some or all of the required SWMP components shall continue implementation of those components.
- 4. Secondary Permittees may implement parts of their SWMP in accordance with the schedule for cities, towns and counties in S5, provided they have signed a memorandum of understanding or other agreement to jointly implement the

activity or activities with one or more jurisdictions listed in S1.B, and submitted a copy of the agreement to Ecology.

- 5. Each Secondary Permittees shall prepare written documentation of the SWMP, called the SWMP Plan. The SWMP Plan shall include a description of program activities for the upcoming calendar year.
- 6. Conditions S6.A, S6.B, and S6.C are applicable to all Secondary Permittees covered under this permit. In addition:
 - a. S6.D is applicable to all Secondary Permittees except the Port of Seattle and the Port of Tacoma.
 - b. S6.E is applicable only to the Port of Seattle and the Port of Tacoma.
- B. Coordination

Secondary Permittees shall coordinate stormwater-related policies, programs and projects within a watershed and interconnected MS4s. Where relevant and appropriate, the SWMP shall coordinate among departments of the Secondary Permittee to ensure compliance with the terms of this permit.

C. Legal Authority

To the extent allowable under state law and federal law, each Secondary Permittee shall be able to demonstrate that it can operate pursuant to legal authority which authorizes or enables the Secondary Permittee to control discharges to and from MS4s owned or operated by the Secondary Permittee.

This legal authority may be a combination of statutes, ordinances, permits, contracts, orders, interagency agreements, or similar instruments.

D. Stormwater Management Program for Secondary Permittees

The SWMP for Secondary Permittees shall include the following components:

1. Public Education and Outreach

Each Secondary Permittee shall implement the following stormwater education strategies:

a. Storm drain inlets owned or operated by the Secondary Permittee that are located in maintenance yards, in parking lots, along sidewalks, and at pedestrian access points shall be clearly labeled with the message similar to "Dump no waste – Drains to water body." ⁵

⁵ New Secondary Permittees shall label all inlets as described in S6.D.1.a no later than four years from the initial date of permit coverage.

- c. The O&M Plan shall include sufficient documentation and records as necessary to demonstrate compliance with the O&M Plan requirements in S6.D.6.a.i through vii above.
- d. No later than three years from the initial date of permit coverage, Secondary Permittees shall implement a program designed to train all employees whose primary construction, operations, or maintenance job functions may impact stormwater quality. The training shall address:
 - i. The importance of protecting water quality.
 - ii. The requirements of this Permit.
 - iii. Operation and maintenance requirements.
 - iv. Inspection procedures.
 - v. Ways to perform their job activities to prevent or minimize impacts to water quality.
 - vi. Procedures for reporting water quality concerns, including potential illicit discharges (including spills).
- E. Stormwater Management Program for the Port of Seattle and Port of Tacoma

Permittees that are already implementing some or all of the Stormwater Management Program (SWMP) components in this section shall continue implementation of those components of their SWMP.

The SWMP for the Port of Seattle and the Port of Tacoma of shall include the following components:

1. Education Program

The SWMP shall include an education program aimed at tenants and Permittee employees. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.

Minimum performance measure:

- a. The Permittee shall make educational materials available to tenants and Permittee employees whose job duties could impact stormwater.
- 2. Public Involvement and Participation

Each Permittee shall make the latest updated version of the SWMP Plan available to the public. The most recent SWMP Plan and Annual Report shall be posted on the Permittee's website.

3. Illicit Discharge Detection and Elimination

The SWMP shall include a program to identify, detect, remove and prevent illicit connections and illicit discharges, including spills, into the MS4s owned or operated by the Permittee.

Minimum performance measures:

- a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Permittee's MS4 is located that govern non-stormwater discharges.
- b. Implement appropriate policies prohibiting illicit discharges and an enforcement plan to ensure compliance with illicit discharge policies. These policies shall address, at a minimum: illicit connections; non-stormwater discharges, including spills of hazardous materials; and improper disposal of pet waste and litter.
 - i. Allowable Discharges: The policies do not need to prohibit the following categories of non-stormwater discharges:
 - (1) Diverted stream flows
 - (2) Rising ground waters
 - (3) Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(b)(20))
 - (4) Uncontaminated pumped ground water
 - (5) Foundation drains
 - (6) Air conditioning condensation
 - (7) Irrigation water from agricultural sources that is commingled with urban stormwater
 - (8) Springs
 - (9) Uncontaminated water from crawl space pumps
 - (10) Footing drains
 - (11) Flows from riparian habitats and wetlands
 - (12) Discharges from emergency firefighting activities in accordance with S2 Authorized Discharges
 - (13) Non-stormwater discharges authorized by another NPDES permit
 - ii. Conditionally allowable discharges: The policies may allow the following categories of non-stormwater discharges only if the stated conditions are met and such discharges are allowed by local codes:

- (1) Discharges from potable water sources, including but not limited to, water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be de-chlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4.
- (2) Discharges from lawn watering and other irrigation runoff. These discharges shall be minimized through, at a minimum, public education activities and water conservation efforts conducted by the Permittee and/or the local jurisdiction.
- (3) Dechlorinated swimming pool, spa, and hot tub discharges. The discharges shall be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted and reoxygenated if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
- (4) Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The Ports of Seattle and Tacoma shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts conducted by the Port and/or the local jurisdiction. To avoid washing pollutants into the MS4, the amount of street wash and dust control water used shall be minimized.
- (5) Other non-stormwater discharges shall be in compliance with the requirements of a pollution prevention plan reviewed by the Permittee which addresses control of such discharges.
- iii. The Permittee shall address any category of discharges in i or ii above if the discharges are identified as significant source of pollutants to waters of the State.
- c. The SWMP shall include an ongoing program for gathering, maintaining, and using adequate information to conduct planning, priority setting, and program evaluation activities for Permittee-owned properties. Permittees shall gather and maintain mapping data for the features listed below on an ongoing basis:
 - i. Known MS4 outfalls and discharge points, receiving waters (other than groundwater), and land uses for property owned by the Permittee, and all other properties served by MS4s known to and owned or operated by the Permittee.

- ii. Tributary conveyances (including size, material, and type attributes where known), and the associated drainage areas of MS4 outfalls and discharge points with a 24 inch nominal diameter or larger, or an equivalent crosssectional area for non-pipe systems. No later than December 31, 2017, each Permittee shall complete this requirement for all MS4 outfalls and discharge points with a 12 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems.
- iii. Known connections greater than or equal to 8 inches in nominal diameter to tributary conveyances mapped in accordance with S6.E.3.c.ii. The mapping shall be completed no later than December 31, 2017.
- iv. To the extent consistent with national security laws and directives, each Permittee shall make available to Ecology upon request, available maps depicting the information required in S6.E.3.c.i through iii, above. The required format for mapping is electronic with fully described mapping standards. An example description is available on Ecology's website.
- v. Implement a program to document operation and maintenance records for stormwater treatment and flow control BMPs/facilities and catch basins.
- vi. Upon request, and to the extent consistent with national security laws and directives, mapping information and operation and maintenance records shall be provided to the City or County in which the Permittee is located.
- d. Conduct field screening of at least 20% of the MS4 each year for the purpose of detecting illicit discharges and illicit connections. Field screening methodology shall be appropriate to the characteristics of the MS4 and water quality concerns. Implement procedures to identify and remove any illicit discharges and illicit connections. Keep records of inspections and follow-up activities.
- e. Implement a spill response plan that includes coordination with a qualified spill responder.
- f. Provide ongoing staff training or coordinate with existing training efforts to educate staff on proper BMPs for preventing illicit discharges, including spills, and for identifying, reporting, and responding as appropriate. Train all Permittee staff who, as part of their normal job responsibilities, have a role in preventing such discharges. Keep records of training provided and staff trained.
- 4. Construction Site Stormwater Runoff Control

The SWMP shall include a program to reduce pollutants in stormwater runoff from construction activities under the functional control of the Permittee.

Minimum performance measures:

- a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Permittee is located that govern construction phase stormwater pollution prevention measures. To the extent allowed by local ordinances, rules, and regulations, comply with the applicable minimum technical requirements for new development and redevelopment contained in Appendix 1.
- b. Ensure all construction projects under the functional control of the Permittee which require a construction stormwater permit obtain coverage under the NPDES General Permit for Stormwater Discharges Associated with Construction Activities or an individual NPDES permit prior to discharging construction related stormwater.
- c. Coordinate with the local jurisdiction(s) regarding projects owned or operated by other entities which discharge into the Permittee's MS4, to assist the local jurisdiction(s) with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).
- d. Provide staff training or coordinate with existing training efforts to educate Permittee staff responsible for implementing construction stormwater erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.
- e. Coordinate as requested with Ecology or the local jurisdiction to provide access for inspection of construction sites or other land disturbances that are under the functional control of the Permittee during active land disturbing activities and/or the construction period.
- 5. Post-Construction Stormwater Management for New Development and Redevelopment

The SWMP shall include a program to address post-construction stormwater runoff from new development and redevelopment projects. The program shall establish controls to prevent or minimize water quality impacts.

Minimum performance measures:

a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Permittee is located that govern post-construction stormwater pollution prevention measures, including proper operation and maintenance of the MS4. To the extent allowed by local ordinances, rules, and regulations, comply with the applicable the minimum technical requirements for new development and redevelopment contained in Appendix 1.

- b. Coordinate with the local jurisdiction regarding projects owned and operated by other entities which discharge into the Permittee's MS4, to assist the local jurisdiction in achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).
- 6. Operation and Maintenance Program

The SWMP shall include an operation and maintenance program for all stormwater treatment and flow control BMPs/facilities, and catch basins to ensure that BMPs continue to function properly.

Minimum performance measures:

- a. Each Permittee shall implement an operation and maintenance (O&M) manual for all stormwater treatment and flow control BMPs/facilities and catch basins that are under the functional control of the Permittee and which discharge stormwater to its MS4, or to an interconnected MS4.
 - i. Retain a copy of the O&M manual in the appropriate Permittee department and routinely update following discovery or construction of new stormwater facilities.
 - ii. The operation and maintenance manual shall establish facility-specific maintenance standards that are as protective, or more protective than those specified in Chapter 4 of Volume V of the Stormwater Management Manual for Western Washington. For existing stormwater facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard. No later than July 1, 2016, each Permittee shall update maintenance standards, as necessary, to meet the requirements of this section.
 - iii. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standards between inspections and/or maintenance is not a permit violation. Maintenance actions shall be performed within the time frames specified in S6.E.6.b.ii.
- b. The Permittee will manage maintenance activities to inspect all stormwater facilities listed in the O&M manual annually, and take appropriate maintenance action in accordance with the O&M manual.
 - i. The Permittee may change the inspection frequency to less than annually, provided the maintenance standards are still met. Reducing the annual inspection frequency shall be based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to

document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 Certification and Signature.

- ii. Unless there are circumstances beyond the Permittees control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:
 - (1) Within 1 year for wet pool facilities and retention/detention ponds.
 - (2) Within 1 year for typical maintenance of facilities, except catch basins.
 - (3) Within 6 months for catch basins.
 - (4) Within 2 years for maintenance that requires capital construction of less than \$25,000.

Circumstances beyond the Permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, the Permittee shall document the circumstances and how they were beyond their control.

- c. The Permittee shall provide appropriate training for Permittee maintenance staff.
- d. The Permittee will maintain records of inspections and maintenance activities.
- 7. Source Control in existing Developed Areas

The SWMP shall include the development and implementation of one or more Stormwater Pollution Prevention Plans (SWPPPs). A SWPPP is a documented plan to identify and implement measures to prevent and control the contamination of discharges of stormwater to surface or ground water. SWPPP(s) shall be prepared and implemented for all Permittee-owned lands, except environmental mitigation sites owned by the Permittee, that are not covered by a NPDES permit issued by Ecology that authorizes stormwater discharges.

Minimum performance measures:

- a. SWPPP(s) shall be updated as necessary to reflect changes at the facility.
- b. The SWPPP(s) shall include a facility assessment including a site plan, identification of pollutant sources, and description of the drainage system.
- c. The SWPPP(s) shall include a description of the source control BMPs used or proposed for use by the Permittee. Source control BMPs shall be selected from the Stormwater Management Manual for Western Washington (or an equivalent Manual approved by Ecology). Implementation of non-structural

BMPs shall begin immediately after the pollution prevention plan is developed. Where necessary, a schedule for implementation of structural BMPs shall be included in the SWPPP(s).

- d. The Permittee shall maintain a list of sites covered by the SWPPP(s) required under this permit. At least 20% of the listed sites shall be inspected annually.
- e. The SWPPP(s) shall include policies and procedures to reduce pollutants associated with the application of pesticides, herbicides and fertilizer.
- f. The SWPPP(s) shall include measures to prevent, identify and respond to illicit discharges, including illicit connections, spills and improper disposal. When the Permittee submits a notification pursuant to G3, the Permittee shall also notify the City or County it is located in.
- g. The SWPPP(s) shall include a component related to inspection and maintenance of stormwater facilities and catch basins that is consistent with the Permittee's O&M Program, as specified in S6.E.6 above.
- 8. Monitoring Program. Monitoring requirements for the Port of Seattle and Port of Tacoma are included in Special Condition S8.

S7. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

The following requirements apply if an applicable Total Maximum Daily Load (TMDL) is approved for stormwater discharges from MS4s owned or operated by the Permittee. Applicable TMDLs are TMDLs which have been approved by EPA on or before the issuance date of this Permit, or prior to the date that Ecology issues coverage under this permit, whichever is later.

- A. For applicable TMDLs listed in Appendix 2, affected Permittees shall comply with the specific requirements identified in Appendix 2. Each Permittee shall keep records of all actions required by this Permit that are relevant to applicable TMDLs within their jurisdiction. The status of the TMDL implementation shall be included as part of the annual report submitted to Ecology. Each annual report shall include a summary of relevant SWMP and Appendix 2 activities conducted in the TMDL area to address the applicable TMDL parameter(s).
- B. For applicable TMDLs not listed in Appendix 2, compliance with this permit shall constitute compliance with those TMDLs.
- C. For TMDLs that are approved by EPA after this permit is issued, Ecology may establish TMDL-related permit requirements through future permit modification if Ecology determines implementation of actions, monitoring or reporting necessary to demonstrate reasonable further progress toward achieving TMDL waste load allocations, and other targets, are not occurring and shall be implemented during the term of this permit or when this permit is reissued. Permittees are encouraged to

participate in development of TMDLs within their jurisdiction and to begin implementation.

S8. MONITORING AND ASSESSMENT

A. All Permittees including Secondary Permittees shall provide, in each annual report, a description of any stormwater monitoring or stormwater-related studies conducted by the Permittee during the reporting period. If other stormwater monitoring or stormwater-related studies were conducted on behalf of the Permittee during the reporting period, or if stormwater-related investigations conducted by other entities were reported to the Permittee during the reporting period, a brief description of the type of information gathered or received shall be included in the annual report.

Permittees are not required to provide descriptions of any monitoring, studies, or analyses conducted as part of the Regional Stormwater Monitoring Program (RSMP) in annual reports. If a Permittee conducts independent monitoring in accordance with requirements in S8.B or S8.C below, annual reporting of such monitoring must follow the requirements specified in those sections.

- B. Status and trends monitoring.
 - 1. No later than October 15, 2013, King, Pierce, and Snohomish Counties, the Cities of Seattle and Tacoma, and the Ports of Seattle and Tacoma shall notify Ecology in writing which of the following two options for status and trends monitoring the Permittee chooses to carry out during this permit cycle. Either option will fully satisfy the Permittee's obligations under this section (S8.B.1). Each Permittee shall select a single option for the duration of this permit term.
 - a. Status and Trends Monitoring Option #1: Each Permittee that chooses this option shall pay into a collective fund to implement RSMP small streams and marine nearshore status and trends monitoring in Puget Sound. The first payment into the collective fund is due to Ecology October 15, 2013, and subsequent payments into the collective fund are due to Ecology annually beginning August 15, 2014. The payment amounts are:

Permittee	First payment	Second and subsequent payments
King County	\$ 15,000	\$ 74,540
Pierce County	\$ 15,000	\$ 92,800
Port of Seattle	\$ 5,000	\$ 4,151
Port of Tacoma	\$ 5,000	\$ 4,151
City of Seattle	\$ 15,000	\$149,436
Snohomish County	\$ 15,000	\$ 73,452
City of Tacoma	\$ 15,000	\$ 49,861

Or

- b. Status and Trends Monitoring Option #2: Each Permittee that chooses this option shall conduct status and trends monitoring as follows:
 - i. Beginning no later than October 31, 2014 city and county Permittees shall conduct wadeable stream water quality, benthos, habitat, and sediment chemistry monitoring according to the Ecology-approved Quality Assurance Project Plan (QAPP) for RSMP Small Streams Status and Trends Monitoring at the first twelve qualified locations (as listed sequentially among the potential monitoring locations defined in the RSMP QAPP) that are located within the jurisdiction's boundaries. Counties shall monitor the first four locations inside UGA boundaries and the first eight locations outside UGA boundaries.
 - ii. Beginning no later than October 1, 2015, city and county Permittees and the Ports of Seattle and Tacoma shall conduct sediment chemistry, bacteria, and mussel monitoring according to the Ecology-approved QAPPs for RSMP Marine Nearshore Status and Trends Monitoring at the first eight qualified locations each, for sediment and for mussels and bacteria (as listed sequentially among the potential monitoring locations defined in the RSMP QAPPs), that are located adjacent to the Permittee's Puget Sound shoreline boundary.
 - iii. Data and analyses shall be reported annually in accordance with the Ecology-approved QAPPs.
- 2. Clark County shall:
 - a. Continue stormwater discharge monitoring at two of the three locations selected pursuant to S8.D in the Phase I Municipal Stormwater Permit February 16, 2007 February 15, 2012 for the duration of this permit term. This monitoring and reporting of findings shall be conducted in accordance with the previously-approved QAPP until September 30, 2014.
 - b. No later than February 2, 2014 submit a revised QAPP to Ecology. The revised QAPP shall follow the specifications and deadlines in Appendix 9. If Ecology does not request changes within 90 days, the QAPP is considered approved. The final QAPP shall be submitted to Ecology as soon as possible following finalization, and before September 30, 2014.
 - c. If the County changes a discharge monitoring location, the County shall document in the revised QAPP why the pre-existing stormwater monitoring location is not a good location for additional monitoring and why the newly selected location is of interest for long term stormwater discharge monitoring.
- C. Stormwater management program effectiveness studies. No later than December 1, 2013, Clark, King, Pierce, and Snohomish Counties, the Cities of Seattle and Tacoma, *Phase I Municipal Stormwater Permit August 1, 2013* Page 55 of 75 Modified August 19, 2016

and the Ports of Seattle and Tacoma shall notify Ecology in writing which of the following three options for effectiveness studies the Permittee chooses to carry out during this permit cycle. Any one of the three options will fully satisfy the Permittee's obligations under this section (S8.C). Each Permittee shall select a single option for the duration of this permit term.

1. Effectiveness Studies Option #1: Each Permittee that chooses this option shall pay into a collective fund to implement RSMP effectiveness studies. The payments into the collective fund are due to Ecology annually beginning August 15, 2014. The payment amounts are:

	Annual
Permittee	payment
	amount
Clark County	\$ 86,617
King County	\$124,196
Pierce County	\$154,619
Port of Seattle	\$ 6,916
Port of Tacoma	\$ 6,916
City of Seattle	\$248,986
Snohomish County	\$122,383
City of Tacoma	\$ 83,077

Or

- 2. Effectiveness Studies Option #2: Each Permittee that chooses this option shall conduct stormwater discharge monitoring in accordance with Appendix 9 and the following:
 - a. Each city and county Permittee, except Clark County, shall conduct stormwater discharge monitoring at five locations. Permittees are encouraged to continue stormwater monitoring at locations monitored under S8.D of the Phase I Municipal Stormwater Permit February 16, 2007 February 15, 2012.

Any Permittee who would like to change a discharge monitoring location or add a new location shall document in the revised QAPP (see S8.C.2.c, below) why the pre-existing stormwater monitoring location is not a good location for additional monitoring and why the newly selected location is of interest for long term stormwater discharge monitoring and associated stormwater management program effectiveness evaluations.

Clark County shall either:

i. Select and monitor five discharge monitoring locations in addition to the two discharge monitoring locations monitored pursuant to S8.B.2 above.

Or

- ii. Select and monitor two discharge monitoring locations in addition to the two discharge monitoring locations monitored pursuant to S8.B.2 and conduct receiving-water monitoring in wadeable streams or lakes at locations downstream of each of all four stormwater discharge monitoring locations.
 - (1) Receiving-water chemistry samples will be collected during and following the storm events for which the discharge monitoring is conducted, and for the same parameters.
 - (2) Sediment samples shall be collected during the month of May or June. Streambed sediment samples at these receiving-water monitoring locations shall be collected and analyzed pursuant to the RSMP Small Streams Status and Trends Monitoring QAPP and for any additional sediment parameters listed in Appendix 9; lake bed sediments shall be collected from the surficial sediment layer and analyzed for the same parameters.
 - (3) Explain in the revised QAPP (see S8.C.2.c below) why the receiving-water monitoring locations were selected and describe in detail the design of the receiving-water monitoring.
- b. Each port Permittee shall conduct stormwater discharge monitoring at two locations representing different pollution-generating activities or land uses. Permittees are encouraged to continue stormwater monitoring at locations monitored under S8.D of the Phase I Municipal Stormwater Permit February 16, 2007 February 15, 2012. Any Permittee who would like to change a discharge monitoring location shall describe why the pre-existing stormwater monitoring location is not a good location for additional monitoring. The Permittee shall document why the newly selected location(s) are of interest for long term stormwater discharge monitoring and associated stormwater management program effectiveness evaluations.
- c. No later than February 2, 2014 each Permittee shall submit to Ecology a draft updated stormwater discharge monitoring QAPP for review and approval. If Ecology does not request changes within 90 days, the draft QAPP is considered approved. Final QAPPs shall be submitted to Ecology as soon as possible following finalization.
- d. Flow monitoring at new discharge monitoring locations shall begin no later than October 1, 2014. Stormwater discharge monitoring shall be fully implemented no later than October 1, 2014 at existing discharge monitoring locations and October 1, 2015 at new discharge monitoring locations. All monitoring shall be conducted in accordance with an Ecology-approved QAPP.

Or

- 3. Effectiveness Studies Option #3: Each Permittee that chooses this option shall both pay into a collective fund to implement RSMP effectiveness studies and independently conduct an effectiveness study that is not expected to be undertaken as part of the RSMP.
 - a. Payments into the collective fund are due to Ecology annually beginning August 15, 2014. The payment amounts are:

	Annual
Permittee	payment
	amount
Clark County	\$ 43,308
King County	\$ 62,098
Pierce County	\$ 77,310
Port of Seattle	\$ 3,458
Port of Tacoma	\$ 3,458
City of Seattle	\$124,493
Snohomish County	\$ 61,192
City of Tacoma	\$ 41,538

And

- b. Conduct the independent effectiveness study in accordance with the requirements below:
 - i. No later than February 2, 2014 submit to Ecology, for review and approval, a detailed proposal describing: the purpose, objectives, design, and methods of the independent effectiveness study; anticipated outcomes; expected modifications to the Permittee's stormwater management program; and relevance to other Permittees.
 - ii. Submit a draft QAPP to Ecology within 120 days of Ecology's approval of the detailed proposal. The QAPP shall be prepared in accordance with Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies, July 2004 (Ecology Publication No. 04-03-030). The QAPP shall include reporting details including timely uploading of all relevant data to Ecology's EIM database and/or the International Stormwater BMP Database as appropriate. If Ecology does not request changes within 90 days of submittal, the QAPP is considered approved.
 - iii. Begin full implementation of the study no later than six months following Ecology's approval of the QAPP.

- iv. Describe interim results and status of the study implementation in annual reports throughout the duration of the study.
- v. Report final results, including recommended future actions, to Ecology and on the Permittee's webpage no later than six months after completion of the study.
- D. Source identification and diagnostic monitoring. Clark, King, Pierce, and Snohomish Counties, the Cities of Seattle and Tacoma, and the Ports of Seattle and Tacoma shall pay into a collective fund to implement the RSMP Source Identification Information Repository (SIDIR). The payments into the collective fund are due to Ecology annually beginning August 15, 2014. The payment amounts are:

	Annual
Permittee	payment
	amount
Clark County	\$ 8,033
King County	\$11,518
Pierce County	\$14,339
Port of Seattle	\$ 641
Port of Tacoma	\$ 641
City of Seattle	\$23,091
Snohomish County	\$11,350
City of Tacoma	\$ 7,704

S9. REPORTING REQUIREMENTS

A. No later than March 31 of each year beginning in 2015, each Permittee shall submit an annual report. The reporting period for the first annual report will be from January 1, 2014 through December 31, 2014. The reporting period for all subsequent annual reports shall be the previous calendar year unless otherwise specified.

Permittees must submit annual reports electronically using Ecology's Water Quality Permitting Portal (WQWebPortal) available on Ecology's website at: <u>http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html</u> unless otherwise directed by Ecology.

Permittees unable to submit electronically through Ecology's WQWebPortal must contact Ecology to request a waiver and obtain instructions on how to submit an annual report in an alternative format.

- B. Each Permittee is required to keep all records related to this permit and the SWMP for at least five years.
- C. Each Permittee shall make all records related to this permit and the Permittee's SWMP available to the public at reasonable times during business hours. The

Permittee will provide a copy of the most recent annual report to any individual or entity, upon request.

- 1. A reasonable charge may be assessed by the Permittee for making photocopies of records.
- 2. The Permittee may require reasonable advance notice of intent to review records related to this permit.
- D. The annual report for Permittees listed in S1.B shall include the following:
 - 1. A copy of the Permittee's current SWMP Plan as required by S5.A.1.
 - 2. Submittal of the annual report form as provided by Ecology pursuant to S9.A, describing the status of implementation of the requirements of this permit during the reporting period.
 - 3. Attachments to the annual report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this permit during the reporting period. Refer to Appendix 12 for annual report questions.
 - 4. If applicable, notice that the MS4 is relying on another governmental entity to satisfy any of the obligations under the permit.
 - 5. Certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.
 - 6. A notification of any annexations, incorporations, or jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period.
- E. Annual Report for Secondary Permittees, including the Port of Seattle and the Port of Tacoma

Each annual report shall include the following:

- 1. Submittal of the annual report as provided by Ecology pursuant to S9.A, describing the status of implementation of the requirements of this permit during the reporting period.
- 2. Attachments to the annual report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this permit during the reporting period. Refer to Appendix 3 for annual report questions for the Ports of Seattle and Tacoma, and Appendix 4 for annual report questions for all other Secondary Permittees.

- 3. If applicable, notice that the MS4 is relying on another governmental entity to satisfy any of the obligations under this permit.
- 4. Certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.
- 5. A notification of any jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period.