



## **Stormwater Management Program**

**March 2010**  
**Permit # WAR 04-5541**



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## ACRONYMS AND ABBREVIATIONS

AKART	All <b>K</b> nown Available and <b>R</b> easonable Methods of Prevention, Control and <b>T</b> reatment
APWA	American Public Works Association
BMP	Best Management Practice
CESCL	Certified Erosion Sedimentation Control Lead
City	City of SeaTac
CWA	Clean Water Act
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
GIS	Geographic Information System
IDDE	Illicit Discharge Detection and Elimination
IPM	Integrated Pest Management
KCSWDM	King County Surface Water Design Manual
LID	Low Impact Development
MS4	Municipal Separate Storm Sewer System
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
Phase II Permit	Western Washington (National Pollutant Discharge Elimination System) Phase II Municipal Stormwater Permit
ROAD MAP	<b>R</b> egional <b>O</b> perations and <b>M</b> aintenance <b>P</b> rogram
SEPA	State Environmental Policy Act
STMC	SeaTac Municipal Code
SWMP	<b>S</b> tormwater <b>M</b> anagement <b>P</b> rogram
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
WRIA	Water Resource Inventory Area
WSDOT	Washington State Department of Transportation
WSU	Washington State University

# 1. INTRODUCTION



This report represents the third Stormwater Management Program (SWMP) document prepared by the City of SeaTac (City) in accordance with the Western Washington [National Pollutant Discharge Elimination System (NPDES)] Phase II Municipal Stormwater Permit (Phase II Permit). The Phase II Permit requires the City to develop a Stormwater Management Program that includes numerous actions and activities with the overall goal of reducing the discharge of pollutants from its storm sewer system to the maximum extent practicable. The actions and activities are described in a number of program components under Section S5.C of the Phase II Permit. The Phase II Permit directs the City to prepare a SWMP document that includes a description for each of these program components.

This section provides background information on the Phase II Permit. This is followed by a mission statement from the City regarding its stormwater management activities. Finally, this section outlines the structure for the remainder of the SWMP report.

## 1.1 BACKGROUND

The following provides a brief background on the development of the Phase II Permit:

- The federal Clean Water Act (CWA) was modified in 1987 to include stormwater in the NPDES permit program. That is, a municipality such as the City, will need an NPDES permit to discharge stormwater from its municipal separate storm sewer system, or MS4, to waters of the state.
- In the state of Washington, the United States Environmental Protection Agency (EPA) has given the Washington State Department of Ecology (Ecology) the authority to administer these permits.
- During the “first phase” of the CWA modification, EPA finalized its rules in 1990 for large municipalities with a population greater than 100,000 (referred to as Phase I municipalities).
- Ecology issued NPDES Phase I permits to: King County, Snohomish County, Pierce County, Clark County, City of Seattle and City of Tacoma.
- Later, EPA finalized its rules in 1999 to include all municipalities in census-defined urban areas with a population greater than 10,000 (referred to as Phase II municipalities).
- With a population of over 25,000 in a census-defined urban area, the City qualifies for coverage under the Ecology Phase II Permit.
- The Phase II Permit allows the City to discharge stormwater from its MS4 into receiving waters such as rivers, creeks, and lakes, provided the City implements a stormwater

management program to:

- Reduce the discharge of pollutants from its MS4 to the maximum extent practicable
- Meet state AKART (All Known Available and Reasonable methods of prevention, control and Treatment) standards
- Protect water quality

To do so, the Phase II Permit requires the City to develop a Stormwater Management Program that includes the following components from Section S5.C of the permit:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Controlling Runoff from New Development, Redevelopment, and Construction Sites
- Pollution Prevention and Operation and Maintenance for Municipal Operations

The SWMP document is to also include any additional information on meeting applicable Total Maximum Daily Loads, or TMDLs, pursuant to Section S7 of the permit. Since no TMDLs apply to the City's receiving waters at this time, this report does not address TMDL issues.

Figure 1-1 provides an overview of the SWMP components and the compliance schedule for key program components. Figure 1-1 also shows that the SWMP requirements are phased throughout the permit cycle (February 2007 through February 2012), with full implementation of the plan by August 2011.

## **1.2 CITY OF SEATAC MISSION**

The City is dedicated to developing a stormwater management program that contributes to protecting the environment. This includes coordinating with others towards this common goal, continuing with the successful programs the City has in place, and providing opportunities for input from the citizens of SeaTac as the stormwater program is fully developed over the next two years.

Because this report is updated annually, it is considered a working or draft document that will be modified as necessary to reflect adaptations the City needs to make as the stormwater management program is developed.

### Figure 1.1. NPDES Phase II Municipal Stormwater Management Program Compliance Schedule

Permit Section	Requirements	Deadline	2007				2008				2009				2010				2011				2012						
			1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr			
<b>55. STORMWATER MANAGEMENT PROGRAM (SWMP)</b>																													
<b>55.A.</b>	SWMP FULLY developed and implemented	08/19/2011																											
	Start tracking SWMP costs	01/01/2009											*																
<b>55.C.1</b>	Public Education and Outreach																												
	Provide education and outreach program	02/15/2009											*																
<b>55.C.2</b>	Public Involvement and Participation																												
	Public participation in SWMP development	02/15/2008				*																							
<b>55.C.3</b>	Illicit Discharge Detection and Elimination																												
	Map storm/sewer system	02/15/2011																							*				
	Adopt ordinance to prohibit illicit discharge	08/15/2009												*															
	Implement illicit discharge detection and elimination program	08/19/2011																								*			
	List a hotline	02/15/2009											*																
	Field staff trained	08/15/2009											*																
	Implement on-going training program	02/15/2010												*															
	Prioritize receiving waters for visual inspection	02/15/2010											*																
	Field assessments of <b>three</b> high priority waterbodies	02/15/2011																*											
	Field assessment of <b>one</b> high priority waterbody	02/15/2012																								*			
	Distribute public education and outreach information	08/19/2011																							*				
<b>55.C.4</b>	Controlling Runoff from New Development, Redevelopment and Construction Sites																												
	Adopt ordinance for new development, redevelopment, and construction site projects	08/15/2009												*															
	Plan review, inspection and enforcement strategy in place	08/15/2009												*															
	Provisions to verify O&M of post-construction stormwater facilities and BMPs	08/15/2009												*															
	Staff trained	08/15/2009												*															
<b>55.C.5</b>	Pollution Prevention and O&M for Municipal Operations																												
	Develop and implement O&M Program	02/15/2010												*															
	Inspect all catch basins and inlets	02/15/2012																									*		
<b>57. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS</b>																													
<b>57.A.</b>	Water Quality Monitoring																												
	Submit Quality Assurance Project Plan (QAPP) to Ecology	05/17/2007	*																										
	Start TMDL monitoring	07/16/2007	*																										
	Pollution Source Control - adopt ordinance requiring source control BMPs, if applicable	02/15/2009										*																	
<b>58. MONITORING</b>																													
<b>58.C.1</b>	Long-term Monitoring Program																												
	Stormwater monitoring - identify outfalls	12/31/2010																	*										
	SWMP effectiveness monitoring - develop hypotheses and select sites	12/31/2010																	*										
<b>59. REPORTING REQUIREMENTS</b>																													
<b>59.A.</b>	Submit Annual Reports																												
	First Annual Report (including SWMP document)	03/31/2008				*																							
	Second Annual Report	03/31/2009								*																			
	Third Annual Report	03/31/2010										*																	
	Fourth Annual Report (including status of monitoring program)	03/31/2011													*										*				
	Fifth Annual Report	03/31/2012																									*		



### 1.3 DOCUMENT ORGANIZATION

This document is organized by program component according to the following sections:

Section 1	Introduction
Section 2	Program Management and Administration
Section 3	Public Education and Outreach
Section 4	Public Involvement and Participation
Section 5	Illicit Discharge Detection and Elimination
Section 6	Controlling Runoff from New Development, Redevelopment, and Construction Sites
Section 7	Pollution Prevention and Operation and Maintenance

For ease of reading, each section provides an overview of what the Phase II program component requires. Each section then summarizes existing activities and programs the City has in place that meet, or contribute toward meeting, the program requirements. Activities accomplished during the reporting year follow. Lastly, each section identifies the activities planned by the City as it works towards fulfilling the goals of the Phase II Permit.

## 2. PROGRAM MANAGEMENT AND ADMINISTRATION



This section outlines the management and administrative activities necessary to support the development and implementation of the City's Stormwater Management Program. While not specifically called out under development of the SWMP document (Section S5.C of the permit), it will be necessary for the City to consider overall management and administration of its Stormwater Management Program. This document builds on the previous Stormwater Management Program document by including a new section summarizing 2009 accomplishments, and where appropriate will provide more detail on activities planned for 2010.

### 2.1 WHAT IS REQUIRED

Stormwater Management Program management and administrative activities are addressed in Section S5.A of the Phase II Permit which requires the City to:

- Develop and implement a SWMP according to the schedules outlined in the permit by 08/19/2011 (see Figure 1-1).
- Prepare a written documentation of the SWMP (this document) that is to be updated at least annually for submittal with the City's annual reports to Ecology no later than 03/31 of each year beginning in 2008.
- Include an ongoing program for gathering, tracking, maintaining, and using the information to evaluate development and implementation of the SWMP, permit compliance, and to help the City set priorities. This should include:
  - Tracking the cost or estimated cost of developing and implementing each SWMP component beginning 01/01/2009.
  - Tracking the number of inspections, official enforcement actions, and types of public education activities stipulated in each SWMP component.
- When necessary, include coordination mechanisms among entities covered under municipal stormwater NPDES permits to encourage coordinated stormwater-related activities within adjoining or shared areas.
- Include coordination mechanisms among departments within each jurisdiction to eliminate barriers in complying with the terms of the Phase II Permit.

## **2.2 EXISTING PROGRAM ACTIVITIES**

### **2.2.1 Coordination**

The City coordinates with a number of entities on stormwater-related issues. These include the following:

- The Miller and Walker Creek Basin Committee which consists of:
  - The City of SeaTac
  - The City of Burien
  - The City of Normandy Park
  - Port of Seattle (Seattle-Tacoma International Airport)
  - King County
  - Washington State Department of Transportation (WSDOT)
- The Des Moines Creek Basin Committee which includes:
  - The City of SeaTac
  - The City of Des Moines
  - Port of Seattle (Seattle-Tacoma International Airport)
- Participation in the Regional NPDES Phase II Permit Coordinators Forum.
- Participation in STORM (Stormwater Outreach for Regional Municipalities) – a regional NPDES education and outreach forum.
- Participation in ROAD MAP – a NPDES Regional Operations and Maintenance Program.
- Participation in a regional Illicit Discharge Detection and Elimination (IDDE) implementation work group.
- Participation in the Water Resource Inventory Area (WRIA) 9 forum for regional stormwater-related issues.
- Coordination of the City’s mapping group (Geographic Information System or GIS) with GIS staff at the City of Burien and the City of Des Moines.
- Coordination with King County and other municipalities on public education workshops offered by the City on water quality-related topics.

### **2.2.2 Tracking Program**

The City has a number of tracking mechanisms in place. These include:

- A Citizen Action Request (CAR) Form used when logging complaints on illicit discharges or spills (received by phone calls, through the City’s website, or in person). The CAR form is also used to track responses to citizen complaints. This includes inspection by City staff, identification of supplies needed, acquisition of the supplies if necessary, and a determination of field crew needed to respond to the complaint.
- A timekeeping system for tracking staff time on NPDES programs.
- The City budget tracking system is also used to monitor expenditures on NPDES related projects and programs.

### **2.2.3 Training Program**

The City requires its staff to attend the following training venues as appropriate:

- Staff in the City’s Public Works Department participate in the Regional Road Maintenance Endangered Species Act (ESA) Training Program.
- Inspection staff responsible for erosion sedimentation control inspections attain Certified Erosion Sedimentation Control Lead (CESCL) Certification through DOE

- approved training.
- IDDE investigation and response staff attend training offered through the Environmental Protection Agency and private consulting firms.
  - City staff attend training on an as-needed basis in design, permitting, plan review, operation and maintenance, and inspections through WSDOT, King County, DOE and the American Public Works Association (APWA), or through in-house training.

## **2.3 ACCOMPLISHED TASKS**

In the previous SWMP document, the City developed a table summarizing the tasks to be accomplished under program oversight and administration. A version of that table is included in this document (see Table 2-1) with updates to show which quarter of 2009 the task was accomplished.

**Table 2-1. Program Oversight and Administration: Accomplished Activities**

	Accomplished Activity	2009 by Quarter			
		1	2	3	4
<b>1</b>	<b>Evaluate existing management and administration activities</b>				
1.1	Hire Stormwater Manager			X	
1.2	Present updated SWMP document to City Council	X			
<b>2</b>	<b>Identify resource needs</b>			X	
2.1	Continue to collaborate with other NPDES communities and adjacent jurisdictions on program tools and evaluation techniques	X	X	X	X
<b>3</b>	<b>Tracking program</b>				
3.1	Identify tracking tools (other than cost-tracking)			X	X
3.2	Develop and implement cost-tracking mechanism	X			
<b>4</b>	<b>Training program</b>				
4.1	Identify training needs and timeframes by SWMP component		X	X	X
4.2	Develop the training program schedule, and/or locate training tools for implementation			X	X
<b>5</b>	<b>Reporting</b>				
5.1	Collate data/information collation for annual report	X			
5.2	Identify annual report attachments and prepare if necessary	X			
5.3	Update SWMP document if necessary	X			
<b>6</b>	<b>Ordinance review and updates</b>			X	X

The following summarizes the tasks accomplished under program management and administration in 2009.

**Task 1 Evaluate existing management and administration activities**

**Task 1.1 Hire Stormwater Manager**

In August of 2009 the City hired a Stormwater Compliance Manager to oversee the implementation of the City’s NPDES Phase II Permit requirements, as well as the Stormwater Management Program.

**Task 1.2 Present updated SWMP document to Council**

In early 2009 City staff presented the updated SWMP document and Annual Report to Council. The documents identified the progress made in implementing the permit requirements in 2008, as well as identified planned implementation activities for 2009.

## **Task 2 Identify Resource Needs**

Upon the review of the past gap analysis and in consideration of pending NPDES program deadlines, the City identified and budgeted for needed resources in 2010. These resources include:

- hiring of a Water Quality Technician;
- purchase of asset management software to meet NPDES tracking needs;
- purchase/acquisition of equipment necessary to implement the IDDE program requirements; and
- additional training needs for new and existing staff.

### **Task 2.1 Continue to collaborate with other NPDES communities and adjacent jurisdictions on program tools and evaluation techniques**

The City continues to collaborate with NPDES communities and regional forums sharing strategies and program tools. In addition the City is partnering in a NPDES stormwater education grant through its involvement with STORM. This effort has produced a regional stormwater education campaign targeting subjects such as car wash run-off, vehicle maintenance, natural yard care and pet waste. These subjects are marketed under the common tag line “Puget Sound Starts Here!”

In addition, neighboring jurisdictions have expressed an interest in utilizing the City’s IDDE services once the program is up and running in 2010. These jurisdictions include the cities of Des Moines, Normandy Park and Burien.

## **Task 3. Tracking Program**

### **Task 3.1 Identify tracking tools (other than cost tracking)**

The City conducted a careful review of the Phase II Permit and identified all tracking tools needed by permit section. These tools included:

- a training tracking system;
- an asset management software to meet NPDES tracking needs for operations and maintenance (O&M) and IDDE requirements;
- a paper tracking system to meet tracking requirements until asset management software is in place; and
- updated development permits and tracking software to address mandatory inspection requirements.

### **Task 3.2 Develop and implement a cost-tracking mechanism**

The City has modified its timekeeping system to track employee time spent on stormwater related activities by SWMP program. In addition, the City’s existing accounting system will be used to track stormwater related expenditures and costs.

## **Task 4. Training Program**

### **Task 4.1 Identify training needs and timeframes by SWMP component**

Beginning in August of 2009, the City evaluated staff training needs by SWMP component. As was anticipated many of the training requirements were already being met including: CESCL training and ESA Regional Road Maintenance Standards training. The following additional training requirements were also identified:

- IDDE Level A Training - training for all municipal field staff who are responsible for identification, investigation, termination, cleanup, and reporting illicit discharges and illicit connections.

- Spill Response and Reporting Training – this training targets all staff meeting the description identified for IDDE Level A Training.
- IDDE Level B Training – an ongoing training program for all municipal field staff, which as a part of their normal job responsibilities, might come into contact with or observe illicit discharges and connections.
- Changes in Process and Procedures – All pertinent City staff must be trained/advised of changes in process and procedures to address NPDES permit requirements for all applicable SWMP program components.

#### **Task 4.2 Develop a training program schedule and/or locate training tools for implementation**

The City has developed a list of training courses which comply with the terms of the applicable NPDES training requirements by SWMP component. The training courses and services providers are as follows:

- IDDE Level A Training – Herrera Environmental, King County and EPA Webinars
- Spill Response Training – Ongoing training is conducted in-house.
- IDDE Level B Training – An in-house training has been developed.
- CESCL Training – DOE approved courses are used.
- Road Maintenance Standards - ESA Regional Road Maintenance Standards Training

### **Task 5 Reporting**

#### **Task 5.1 Collate data/information for next year's annual report**

The City initiated collating data and information needed for the annual report.

#### **Task 5.2 Identify annual report attachments and prepare if necessary**

The City identified the SWMP document as the only annual report attachment.

#### **Task 5.3 Update SWMP document if necessary**

During the first quarter of 2009, the City initiated updating its SWMP document as part of its annual report which covered the activities implemented in 2008.

### **Task 6 Ordinance review and updates**

City staff developed and initiated three code amendments to the City's Surface and Stormwater Management ordinance in 2009. These ordinances addressed the following topics:

- Adoption of an IDDE code in August of 2009.
- Amendment of the IDDE ordinance to allow for equitable enforcement of the IDDE ordinance for discharges to natural waterways in December of 2009.
- Adoption of the 2009 King County Surface Water Design Manual (KCSWDM) as amended by the City of SeaTac Addendum to the KCSWDM (Effective - February 15, 2010). The City of SeaTac Addendum included adoption of supplemental manuals and guidance documents by reference including:
  - The 2008 King County Stormwater Pollution Prevention Manual
  - The 2005 Low Impact Development Technical Guidance Manual
  - The Regional Road Maintenance – Endangered Species Act Program Guidelines
  - The City of SeaTac Integrated Pest and Vegetation Management Plan

## **2.4 2010 PLANNED ACTIVITIES**

The following are activities planned by the City to support development and implementation of its SWMP in 2010:

- Hire a Water Quality Technician to assist in the implementation of the IDDE and other SWMP programs.
- Present updates of the City's SWMP document and annual report to the City Council or City Council sub-committee. These meetings are open to the public.
- Purchase and implement an asset management data base system to provide greater efficiency to O&M and IDDE tracking components.
- Continue to implement the remaining IDDE and mapping requirements.
- Continue/maintain staff training on pertinent SWMP components.
- Continue to participate in regional NPDES forums and other NPDES jurisdictions to share tools and strategies for implementation.
- Coordinate collation of information for the annual report including updating the SWMP document.
- Initiate program planning for the following year.



### 3. PUBLIC EDUCATION AND OUTREACH

This section summarizes the Phase II Permit requirements for public education and outreach, describes existing program activities the City has underway for public education and outreach, and presents the City's planned public education and outreach activities.

#### 3.1 WHAT IS REQUIRED

Section S5.C.1 of the Phase II Permit requires the City to provide an education and outreach program for the area served by its MS4 no later than 2/15/2009. The goal of the program is to educate the community about the impacts of stormwater discharges on local waterbodies and reduce or eliminate behaviors/practices that cause or contribute to adverse stormwater impacts.

The program may target the following audiences:

- General public
- Businesses including home-based and mobile businesses
- Homeowners, landscapers, and property managers
- Engineers, contractors, developers, review staff, and land use planners

The Phase II Permit also requires the City to measure the understanding and adoption of a targeted behavior among a target audience once within the permit cycle. The resulting measurements are to be used to direct education and outreach efforts most effectively and evaluate changes in targeted behaviors.

This section of the Phase II Permit also requires the City to track and maintain records of public education and outreach activities.

#### 3.2 EXISTING PROGRAM ACTIVITIES

The City has an active public education and outreach program that uses a variety of approaches to inform residents and businesses about stormwater-related pollution prevention activities.

The City uses many sources for educational information such as Ecology, Hazardous Waste and Toxics Reduction, EPA Region 10, King County Department of Natural Resources and Parks, Water Resource Inventory Area (WRIA-9), other NPDES jurisdictions and local environmental organizations.

Some examples of materials and activities relevant to SeaTac issues include:

- **Brochures or fact sheets** for general public and specific audiences
- **Recreational guides** to educate groups such as boaters and hikers accompanied by their dogs
- **Alternative information sources**, such as websites and posters for schools or specific businesses such as restaurants
- **Event participation** with educational displays at community environmental classes, events, and festivals
- **Storm drain markers** with the message "No Dumping - Drains to Stream."
- **SeaTac Spill Hotline** for citizens reporting spills, polluters, or for information
- **Tributary signage** to increase public awareness at local water resources

Examples of specific education materials and activities include:

- City of SeaTac Newsletter
- Channel 21 SEATV — educational videos
- Shoreline Stewardship Booklet

- Water Quality/Conservation Classes and events:
  - SeaTac Special Recycle Events,
  - Natural Yard Care Classes,
  - Organic Gardening, and Integrated Pest Management (IPM) classes
- SudSafe Car Wash Kit
- Curb Marker Program “No Dumping - Drains to Stream” with the City of SeaTac logo installed by community groups and in new subdivisions
- Des Moines Creek Basin Plan—schools, community groups, businesses, and citizens contribute to public education, habitat restoration, and stream cleanups
- Miller and Walker Creek Basin Stewardship Program includes development of website with public education information accessed at:  
<http://dnr.metrokc.gov/wlr/watersheds/puget/miller/index.htm>

### **3.3 ACCOMPLISHED TASKS**

In the previous SWMP document, the City developed a table summarizing the tasks to be accomplished under public education and outreach. A version of that table is included in this document (see Table 3-1) with updates to show which quarter of 2009 the task was accomplished.

**Table 3-1. Public Education and Outreach: Accomplished Activities**

	Accomplished Activity	2009 by Quarter				Comments
		1	2	3	4	
<b>1</b>	<b>Evaluate existing public education/outreach activities</b>	X				Ongoing
<b>2</b>	<b>Update public education program</b>	X				Ongoing
2.1	Identify audiences to be targeted	X				Ongoing
2.2	Identify additional public education materials/activities if necessary	X				Ongoing
2.3	Initiate program to measure understanding and adoption of behaviors				X	Ongoing
2.4	Develop mechanism to track public education activities		X			Ongoing
<b>3</b>	<b>Reporting</b>					
3.1	Collate data/information for annual report	X				Ongoing
3.2	Identify annual report attachments and prepare if necessary	X				Ongoing
3.3	Update SWMP document if necessary	X				By 3-31 Annually
<b>4</b>	<b>Plan next year's public education activities</b>				X	Ongoing

The following summarizes the tasks accomplished under public education and outreach in 2009.

**Task 1. Evaluate existing public education/outreach activities**

The City continues to review and evaluate existing public education and outreach programs, as well as evaluate educational materials from city, county, state and federal and environmental agencies for potential use.

**Task 2. Update public education program**

The City's primary focus for 2009 was to maintain its existing programs and begin to update them to be consistent with the regional messaging of the Stormwater Outreach for Regional Municipalities (STORM) multi-media campaign to reinforce the "Puget Sound Starts Here!" theme. [Note: STORM is a regional forum of Phase I and II public agencies working together to develop and implement a stormwater education campaign for the greater Puget Sound Region. City staff have been actively participating in the STORM forum, since its creation in 2007. The Puget Sound Starts Here campaign was launched in 2009 and includes cable television public service announcements, a website and print media.]

**Task 2.1 Identify audiences to be targeted**

Education and outreach efforts are prioritized to target the audiences and subject areas outlined in the permit.

### **Task 2.2 Identify additional public education materials/activities if necessary**

Given the ongoing efforts of STORM, the City decided it would make better use of its limited resources by dovetailing its own public education and outreach activities with those of the regional forum. City staff actively participated in the development of the STORM campaign in 2009, which targeted our primary educational needs: pet waste, natural yard care, car wash run-off and vehicle maintenance.

### **Task 2.3 Initiate program to measure understanding and adoption of behaviors**

City staff continued to coordinate with STORM to measure the effectiveness of the Puget Sound Starts Here campaign. In addition, staff has planned and budgeted for measuring understanding and adoption of behaviors on a given target area on a minimum of two subject areas identified within the permit.

### **Task 2.4 Develop mechanism to track public education activities**

The City developed a simple spreadsheet to track public education activities.

## **Task 3. Reporting**

### **Task 3.1 Collate data/information for annual report**

During the first quarter of 2009 the City collated information on its activities for the annual report covering the year of 2008.

### **Task 3.2 Identify annual report attachments and prepare if necessary**

The City identified the SWMP document as the only annual report attachment.

### **Task 3.3 Update SWMP document if necessary**

Also during the first quarter of 2009, the City updated its SWMP document as part of its annual report covering the year of 2008.

## **Task 4. Plan next year's public education activities**

In the third and fourth quarters of 2009, City staff began planning education and outreach program activities for 2010.

## **3.4 PLANNED ACTIVITIES**

The City's planned activities for public education and outreach are to: Continue public education and outreach activities already initiated by the City. Build upon existing public education and outreach activities identified above to meet permit requirements. Examples include:

- Distribute public education materials on yard care practices to protect water quality
- Distribute public education materials on BMPs for use and storage of pesticides and fertilizers
- Continue to develop approaches to measure the understanding and adoption of targeted behaviors
- Continue to track and maintain records of public education activities
- Continue to update applicable existing programs to be consistent with "Puget Sound Starts Here!" campaign in an effort to maintain consistent messaging
- Continue to participate in the King County regional outreach forum, STORM, when possible

- Continue to participate in public education and outreach regional training workshops, when possible

## 4. PUBLIC INVOLVEMENT AND PARTICIPATION



This section summarizes the Phase II Permit requirements for public involvement and participation, describes activities the City has underway for public involvement and participation, and presents the City's planned public involvement and participation activities.

### 4.1 WHAT IS REQUIRED

Section S5.C.2 of the Phase II Permit requires the City to include ongoing opportunities for public involvement through advisory councils, watershed committees, participation in developing rate structures, stewardship programs, environmental activities, or other similar activities. The City is also required to make its SWMP document, annual report, and all other submittals required under the Phase II Permit, available to the public and posted on the City's website.

### 4.2 EXISTING PROGRAM ACTIVITIES

The City has a number of ongoing public involvement and participation activities that compliment and work with the City's public education and outreach activities. These are described below.

#### 4.2.1 Lake Monitoring and Lake Monitoring Volunteers

The City contracts with King County Department of Natural Resources, Water and Land Resources Division, to monitor limited aspects of water quality in Angle Lake, with the help of citizen volunteers. In addition, King County staff are available to speak to citizens' groups and lake associations on water quality topics and to give technical advice on lake-related topics and lake-friendly practices.

#### 4.2.2 Stream Stewardships

These public events are coordinated through Miller/Walker Creek and Des Moines Creek Basin committees. Volunteers pick up litter and debris along stream corridors, remove invasive plants, and plant native species to help prevent pollution, flow obstructions, and the potential impacts of erosion and flooding.

#### 4.2.3 Des Moines Creek Basin Plan

Working collectively, the participating agencies have developed a robust watershed

management plan to protect natural resources. By providing regional leadership and technical expertise, agencies have played a key role in the development of this unique set of projects. Completion of these projects will not only be a major step toward restoration of Des Moines Creek, but will provide a template for future watershed restoration efforts.

The City is working to increase public awareness of the Des Moines Creek watershed and involve volunteers in salmon restoration efforts. Schools, community groups, businesses, and citizens have contributed hundreds of hours to restoring the Des Moines Creek Watershed.

#### **4.2.4 City of SeaTac Newsletter and Website**

The City has featured articles in recent issues of the City's newsletter on the Phase II NPDES program and has created a web page on the City's website with a summary of the Phase II Permit and its requirements. Both the newsletter and the City's web page include information on how to provide the City with feedback on the SWMP.

#### **4.2.5 Curb Marker Program**

Storm drain marking is an established method of involving the public to increase community awareness of stormwater pollution. Through this program, SeaTac works with neighborhood developers and volunteers to mark storm drain inlets or catch basins with a colorful, plastic curb marker with the message "No Dumping -Drains to Stream." Door hangers with additional educational information are regularly left at surrounding new homes in the development.

#### **4.2.6 Evaluation and Consideration of Public Comments**

Public comments on SWMP program development are evaluated based on the following criteria:

- consistency with Phase II Permit requirements,
- consistency with City codes and policies,
- feasibility, and
- costs and benefits.

### **4.3 ACCOMPLISHED TASKS**

In the previous SWMP document, the City developed a table summarizing the tasks to be accomplished under public involvement and participation. A version of that table is included in this document (see Table 4-1), with updates to show which quarter of 2009 the task was accomplished.

**Table 4-1. Public Involvement and Participation: Accomplished Activities**

	Accomplished Activity	2009 by Quarter				Comments
		1	2	3	4	
1	Evaluate existing public involvement/participation activities			X		Annual review
2	Continue ongoing public involvement/participation strategies			X	X	Ongoing
2.1	Create opportunities for public involvement	X	X	X	X	Ongoing
2.2	Post current annual report and SWMP document on the City website	X				Annually 03/31
3	Reporting					
3.1	Collate data/information for annual report	X				Ongoing
3.2	Identify annual report attachments and prepare if needed	X				Ongoing
3.3	Update SWMP document if necessary	X				Annually 03/31
4	Plan next year's public involvement activities				X	Ongoing

The following summarizes the tasks accomplished under public involvement and participation in 2009.

**Task 1. Evaluate existing public involvement/participation activities.**

City staff continue their ongoing evaluation of the public involvement and participation activities in 2009. As a result of the evaluation, the City has created a Permit Stakeholders Committee composed of local developers and consulting engineers to provide comments on the issues of low impact development and the adoption of new stormwater regulations.

**Task 2. Continue ongoing public involvement/participation strategies**

**Task 2.1 Create opportunities for public involvement**

Throughout 2009, the City created a number of opportunities for the public to be involved in development of its stormwater program. These included updating the web page dedicated to the NPDES Phase II Municipal Stormwater Permit Program on the City's website <http://www.ci.seatac.wa.us/index.aspx?page=189>, publishing articles on the Phase II Permit in the City's newsletter "SeaTac Report", and presenting information on the permit, proposed code amendments, the Annual Report and the SWMP document at public meetings such as the Transportation and Public Works Committee and City Council meetings.

**Task 2.2 Post current annual report and SWMP document on the City website**

In accordance with Section S5.C.2 of the permit, the City posted a copy of its annual report



and SWMP document on its website at the following address:  
<http://www.ci.seatac.wa.us/index.aspx?page=189>. The City's website includes an email address and telephone number for the public to send comments directly to the City. The City also included an announcement in its SeaTac Report newsletter on the SWMP document, where to find it, and how to provide the City with any feedback.

### **Task 3. Reporting**

#### **Task 3.1 Collate data/information for annual report**

In the first quarter of 2009 the City collated information on its public involvement/participation activities for the annual report covering the year of 2008.

#### **Task 3.2 Identify annual report attachments and prepare if needed**

During the first quarter of 2009, the City identified what attachments are needed for the annual report. A list of these attachments was prepared for internal use by City staff. The only attachment needed for the annual report is the SWMP document.

#### **Task 3.3 Update SWMP document if necessary**

During the first quarter of 2009, the City updated its SWMP document as part of its annual report covering the year of 2008.

### **Task 4. Plan next year's public involvement activities.**

During the last quarter of 2009, the City initiated planning its future public involvement/participation activities.

## **4.4 PLANNED ACTIVITIES**

The following presents activities planned by the City to continue supporting its public involvement and participation program.

- Continue current public involvement and participation activities already initiated by the City, such as storm drain curb markers and update them as necessary.
- Post the City's SWMP document on the City's website on or before March 31 of each year.
- Provide ongoing opportunities for the public to comment on the SWMP document through contact information on the City's website, public comments recorded at City Council meetings, and solicitations for comment in the City's newsletter.
- Present the City's SWMP plans to a City Council or council committee meeting. These meetings are open to the public.
- Periodically update the City Council on progress of the SWMP as needed.



## **5. ILLICIT DISCHARGE DETECTION AND ELIMINATION**

This section summarizes the Phase II Permit requirements for illicit discharge detection and elimination (IDDE), describes activities the City has underway for IDDE, and presents the City's planned IDDE activities.

### **5.1 WHAT IS REQUIRED**

The City is required by Section S5.C.3 of the Phase II Permit to develop, implement, and enforce a program to detect and remove illicit connections, discharges, and spills into the City's MS4. This program is required to include:

- A municipal storm sewer system map that shows the location of all known outfalls, receiving waters, and structural best management practices (BMPs). For all outfalls with a nominal diameter of more than 24 inches (or an equivalent cross-sectional area for non-pipe systems), the City should document the tributary conveyance structures, the associated drainage areas, and the land use. The City also needs to develop a mechanism for updating the map.
- A regulatory mechanism to prohibit non-stormwater discharges into the MS4 that includes escalating enforcement procedures and actions.
- An IDDE plan to detect and address non-stormwater discharges and illegal dumping into the City's MS4. This plan should include procedures to screen for illicit discharges; trace, characterize, and remove the discharges; educate the community on the hazards associated with illicit discharges; and assess the effectiveness of the City's IDDE program.
- A hotline for the public to report spills and other illicit discharges including a record of all calls received and follow-up actions.
- Training for municipal field staff on the identification and reporting of illicit discharges into MS4s. This needs to ensure that all field staff that are currently responsible for illicit discharges are trained to conduct these activities and should also include an ongoing training program.
- Documentation of reported illicit discharges, responses, and enforcement actions, as well as documentation of training and staff trained.

### **5.2 EXISTING PROGRAM ACTIVITIES**

The City has several of the elements required for an IDDE program in place. These include:

- The City's GIS Department continues to update the GIS database to add new facilities or

- update existing data.
- A hotline for citizens to call in illicit discharge or spill complaints. The information is recorded in a Citizen Action Request form and logged into a database. The database is then used to track follow-up efforts by City staff such as inspection, identification of needed supplies, and a determination of the field crew needed to respond.
  - Inspections of private facilities for illicit discharges and follow-up work orders.
  - Participation by the City's Public Works Department staff in the Regional Road Maintenance ESA Training Program.
  - Multiple education and outreach outlets that have been or are currently being utilized. There is an existing stormwater page on the City's website that can be expanded as needed. The City's quarterly newsletter can be further used to provide educational opportunities to businesses and the public.
  - Discharge removal capability through the Maintenance Division to address any illicit discharge found within the city's structures, including identification, investigation, and termination, if appropriate, cleanup for spills they are responsible for, and reporting requirements to the appropriate agencies.
  - As part of the City's ongoing public education program, the following components are used to address illicit discharges, when applicable:
    - SudSafe Car Wash Kit
    - Curb Marker Program with the message "No Dumping - Drains to Stream."

### **5.3 ACCOMPLISHED TASKS**

Table 5-1 provides a summary of accomplished tasks and subtasks with comments on their implementation. Because the Phase II Permit requires the City to implement its IDDE program by 2011, this section presents general activities for developing an IDDE program as well as some specific activities needed to meet IDDE program deadlines.

**Table 5-1. Illicit Discharge Detection and Elimination Program: Accomplished Activities**

	<b>Accomplished Activity</b>	<b>2009 by Quarter</b>				<b>Comments</b>
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	
<b>1</b>	<b>Evaluate existing illicit discharge detection and elimination program</b>	X		X		Ongoing with annual review
<b>2</b>	<b>Storm sewer system map</b>					2/16/2011
2.1	Review existing maps and identify data gaps based on permit requirements	X	X	X	X	Ongoing
2.2	Document permit-required attributes	X	X	X	X	Ongoing
2.3	Develop procedures for additions and updates as needed	X	X	X	X	Ongoing
<b>3</b>	<b>Adopt Code</b>					8/16/2009
3.1	Review existing code and update to address illicit discharges if needed			X	X	
<b>4</b>	<b>IDDE program</b>					8/19/2011
4.1	Prioritize receiving waters for inspection			X	X	
4.2	Review tracking/documentation procedures and update if necessary			X	X	
4.3	Review public education/outreach efforts and update if necessary			X	X	
<b>5</b>	<b>List a Hotline</b>	X				2/16/2009
5.1	Evaluate current hotline procedures and update if necessary			X	X	
<b>6</b>	<b>Field staff training</b>					
6.1	Review current training program and identify additional training if necessary		X	X		
6.2	Develop on-going training program			X	X	
6.3	Develop mechanism to track training				X	
<b>7</b>	<b>Reporting</b>					Annually 3/31
7.1	Collate data/information for annual report	X				
7.2	Identify annual report attachments and prepare if needed	X				Ongoing
7.3	Update SWMP document if necessary	X				Annually 3/31
<b>8</b>	<b>Plan next year's IDDE activities</b>			X	X	Ongoing

## **Task 1. Evaluate existing illicit discharge detection and elimination program**

Based upon a “gap analysis” conducted by our consulting firm in 2008, as well as an in-house analysis conducted by city staff in 2009, program updates and expansions were identified to meet the IDDE program requirements by the permit deadlines. These needed program updates and expansions included:

- Hiring a Water Quality Technician to assist in the implementation of the IDDE program
- Training needs
- Equipment needs

## **Task 2 Storm sewer system map**

### **Task 2.1 Review existing maps and identify data gaps based on permit requirements**

City GIS staff continue to update stormwater drainage system maps based on the gaps identified by engineering and stormwater staff.

### **Task 2.2 Document permit-required attributes**

City GIS staff continue to update stormwater drainage system maps based on the gaps identified by engineering and stormwater staff.

### **Task 2.3 Develop procedures for additions and updates as needed**

The City staff continues to evaluate procedures for additions and updates to its storm system for IDDE.

## **Task 3 Adopt Code**

### **Task 3.1 Review existing code and update to address illicit discharges, if needed**

The City reviewed its code and drafted an IDDE ordinance to address program requirements. The City IDDE ordinance (SMC 12.12) was adopted on August 11, 2009 in fulfillment of permit requirements. Additional IDDE code amendments were adopted in December of 2009 to allow for equitable enforcement of illicit discharges to natural waterways.

## **Task 4. Illicit Discharge Detection and Elimination Program**

### **Task 4.1 Prioritize receiving waters for inspection**

City staff evaluated and prioritized the major receiving waters within the City based upon the following criteria:

- potential risk of illicit discharge based on land use activities,
- size of the contributing basin, and
- history of illicit discharges and spills.

Based upon this evaluation the receiving waters have been prioritized as follows:

- 1) Des Moines Creek
- 2) Miller Creek
- 3) Angle Lake
- 4) Unnamed Creeks

The three unnamed creeks (one located near SeaTac north eastern border west of Military Road; and two located near SeaTac’s central eastern border west of Military Road and north

of S. 178<sup>th</sup> St.) receive runoff from residential neighborhoods of roughly equivalent size and therefore are ranked equally.

#### **Task 4.2 Review tracking/documentation procedures and update if necessary**

The City currently tracks information regarding spill types, illicit discharges, and inspections. However, based on staff's review of the City's existing tracking system, potential improvements and process efficiencies were identified. In an effort to implement these improvements and efficiencies, the City has acquired grants and budget for the purchase and implementation of an asset management data base system to improve tracking and reporting capabilities for both the IDDE program and the operations and maintenance program.

#### **Task 4.3 Review public education/outreach efforts and update if necessary (in coordination with the City's public education and outreach program)**

The City continued to review its IDDE public education/outreach efforts along with other stormwater public education and outreach. Based upon the regional media campaign launch of STORM (referenced in the public education and outreach program - section 3 of this SWMP) staff has begun to update the City's existing programs to provide consistent messaging to the "Puget Sound Starts Here!" campaign.

### **Task 5 List a hotline**

The Spill Hotline was established and tracking procedures implemented in advance of the permit February 15, 2009 deadline. The hotline is posted on the City's web page and has been advertised within the City newsletter and other educational elements.

The City of SeaTac's Spill Hotline is:

- 206.973.4770 Monday – Friday 7AM to 3:30 PM
- 206.296.8100 After Hours/Weekends and Holidays

#### **Task 5.1 Evaluate current hotline procedures and update if necessary**

Based on staff's review of the City's existing tracking system, potential improvements and process efficiencies were identified. In an effort to implement these improvements and efficiencies, the City has acquired grants and budget for the purchase and implementation of an asset management data base system to improve tracking and reporting capabilities for both the IDDE program and the operations and maintenance program.

### **Task 6. Field staff trained**

#### **Task 6.1 Review current training program and identify additional training if necessary**

Based on staff's review of the existing training program, additional training needs were identified and implemented to meet the IDDE program training requirements including:

- IDDE Level A Training - IDDE investigation and response staff attend training offered through both private and public agencies.
- IDDE Level B Training - All municipal field staff take an in-house IDDE training on the identification and reporting of illicit discharges.

### **Task 6.2 Develop ongoing training program**

Training sources for the above mentioned established IDDE Level A were identified in 2009 and applicable staff were trained prior to the August 16, 2009 permit deadline. In addition, City staff developed an in-house Level B IDDE training during the fourth quarter of 2009.

### **Task 6.3 Develop mechanism to track training**

The City has developed and implemented a mechanism to track IDDE training.

## **Task 7. Reporting**

### **Task 7.1. Collate data/information for annual report**

The City initiated collecting information on its IDDE activities for its annual report in 2009.

### **Task 7.2. Identify annual report attachments and prepare if needed**

During the first quarter of 2009, the City identified what attachments are needed for the annual report. A list of these attachments was prepared for internal use by City staff. The only attachment needed for the annual report is the SWMP document.

### **Task 7.3 Update SWMP document if necessary**

During the first quarter of 2009, the City initiated updating its SWMP document as part of its annual report covering 2008.

## **Task 8. Plan next year's IDDE activities**

The City is continuing to plan for and develop its IDDE program.

## **5.4 PLANNED ACTIVITIES**

In addition to the City's existing IDDE activities, the following identifies activities the City plans to undertake for its illicit discharge detection and elimination program.

- Continue to update the City's storm sewer system map to meet the Phase II Permit requirements.
- Continue to coordinate with neighboring cities and the Port of Seattle to possibly share GIS data and IDDE services.
- Develop and implement outfall illicit discharge screening procedures.
- Review the City's current procedures to trace, characterize, and remove illicit discharges, and update if necessary.
- Purchase and implement an asset management data base system to improve the IDDE tracking system.
- Evaluate current hot line procedure, and update, formalize, and document any new protocols.
- Continue to implement an IDDE training program.
- Continue to review and update the City's public education activities and update to address illicit discharges if necessary.
- Participate in the King County Regional Operation and Maintenance Program (IDDE subcommittee) as possible.
- Continue to participate in the STORM forum, as possible.

## **6. CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES**



This section summarizes the Phase II Permit requirements for runoff from new development, redevelopment and construction sites; describes existing program activities the City has underway for runoff control; and presents the City's planned runoff control activities.

### **6.1 WHAT IS REQUIRED**

Section S5.C.4 of the Phase II Permit requires the City to develop, implement, and enforce a program to reduce pollutants in stormwater runoff to its MS4 from new development, redevelopment, and construction site activities. This program must apply to both public and private projects, including roads, and address all site-related pollutant sources. The program should include:

- A regulatory mechanism to implement the program according to the technical thresholds, minimum requirements, and definitions in Appendix 1 of the Phase II Permit (or an equivalent approved by Ecology).
- A permitting process with plan review, inspection and enforcement capability to meet the above referenced standards required by the Phase II Permit.
- Legal authority to inspect private stormwater facilities that discharge to the City's MS4.
- Provisions to allow for Low Impact Development (LID) techniques.
- A regulatory mechanism to verify adequate long-term operation and maintenance of post-construction stormwater facilities and BMPs.
- A mechanism to make available all copies of the notice of intent (NOI) for both construction and industrial activities.
- Training for all staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement.
- Procedures for tracking plan reviews, inspections, responses, enforcements, maintenance activities, and staff training.

### **6.2 EXISTING PROGRAM ACTIVITIES**

The City has an active program to reduce pollutants in stormwater runoff from new development,



redevelopment, and construction site activities. The existing program applies to both public and private projects, including roads. The compliance activities associated with the Phase II Permit requirements include:

- SeaTac Municipal Code (SMC) 12.10 adopts the minimum standards of the 2005 King County Surface Water Design Manual (KCSWDM).
- The City maintained its existing development review and inspection processes in 2009 as required under the NPDES Permit.
- The City’s Engineering Department has developed a “permit process” and stormwater technical manual, which provides guidance and checklists for plan review, State Environmental Policy Act (SEPA) review, inspections, and enforcement.
- The City provides copies of the Notice of Intent for Construction Activity and Notice of Intent for Industrial Activity or NPDES Construction Stormwater General Permit Focus Sheets to representatives of proposed new development and redevelopment.
- Inspections and corrective actions are enforced through chapters 13.100 and 1.15 of SMC.
- Fines are enforced through SMC 13.190.080.
- The City has the authority to inspect private stormwater facilities through STMC 12.10.
- The City maintains records of inspections, corrective actions, and enforcement.

### **6.3 ACCOMPLISHED ACTIVITIES**

In the previous SWMP document, the City developed a table summarizing the tasks to be accomplished under controlling runoff. A version of that table is included in this document (see Table 6-1) with updates to show which quarter of 2009 the task was accomplished.

**Table 6-1. Controlling Runoff from New Development, Redevelopment, and Construction Sites: Accomplished Activities**

	Accomplished Activity	2009 by Quarter				Comments
		1	2	3	4	
1	Evaluate existing runoff control program			X	X	Began in 2008 with yearly review
2	<b>Adopt Code</b>					<b>Due 2/16/2010</b>
2.1	Review existing code for permit standards and update if necessary			X	X	Ordinance Adopted Effective date 2/15/10
2.2	Include provisions for LID (or equivalent) if necessary			X	X	Ordinance Adopted Effective date 2/15/10
2.3	Evaluate procedures for application of erosivity waiver and update if necessary			X	X	Optional: Opted not to Implement
3	<b>Plan review, inspection, and enforcement</b>					<b>Due 2/16/2010</b>
3.1	Evaluate plan review, inspection, and enforcement procedures and update if necessary			X	X	Necessary updates identified
3.2	Review and establish legal authority to inspect new facilities if necessary					SMC 12.10.180
3.3	Develop mechanism to track plan review, inspections, and enforcement actions			X	X	Necessary updates identified
4	<b>Verify operation and maintenance (O&amp;M) of post-construction BMPs</b>			X	X	<b>Due 2/16/2010</b>
4.1	Review existing code for long-term O&M and update if necessary			X	X	Necessary updates identified
4.2	Review current inspection program and update if necessary			X	X	Necessary updates identified
5	<b>Staff trained</b>			X	X	<b>Due 2/16/2010</b>
5.1	Review current training program and identify additional training if necessary			X	X	Necessary updates identified
5.2	Develop ongoing training program			X	X	Necessary updates identified
5.3	Develop mechanism to track training			X	X	Necessary updates identified
6	<b>Reporting</b>					<b>Due March 31 of each year</b>
6.1	Collate data/information for next year's annual report					Not due yet
6.2	Identify annual report attachments and prepare if necessary	X				Ongoing
6.3	Update SWMP document if necessary	X				Due March 31 of each year starting in 2008
7	<b>Plan next year's runoff control activities</b>			X	X	<b>Ongoing</b>

## **Task 1. Evaluate existing runoff control program**

Upon review of the gap analysis conducted by the consulting firm in 2008 and a subsequent staff evaluation in 2009, City staff identified specific program implementation tasks and timelines for completion to implement the required program elements.

## **Task 2. Adopt Code**

### **Task 2.1 Review existing code for permit standards and update, if necessary**

Pursuant to the requirements of the NPDES permit, City staff drafted and presented code amendments to City Council to address the gaps needed to comply with the construction site run-off section S5.C4. of the permit. These code amendments accomplished the following, which go into effect on February 15, 2010:

- Adopts the 2009 King County Surface Water Design Manual (KCSWDM) as amended by the City of SeaTac Addendum to the KCSWDM
- Adopts the City of SeaTac Addendum to the KCSWDM, which addresses the following:
  - Amends the KCSWDM to achieve equivalency with permit requirements as identified by DOE guidance document
  - Adopts 2005 Low Impact Development (LID) Technical Guidance Manual as supplemental guidance for the use of LID in the City
  - Adopts the Regional Road Maintenance – Endangered Species Act Program Guidelines
  - Adopts the City of SeaTac Integrated Pest and Vegetation Management Plan

### **Task 2.2 Include provisions for LID (or equivalent), if necessary**

In 2009 City staff reviewed existing codes for potential barriers to the use of LID. No codal barriers to the use of LID were found, however staff did identify areas for improvement in internal procedures which may help to encourage the use of LID. In addition, the City of SeaTac Addendum to the KCSWDM included adoption of “The 2005 Low Impact Development Technical Guidance Manual” as supplemental guidance to the KCSWDM.

### **Task 2.3 Evaluate procedures for application of erosivity waiver and update, if necessary**

In 2009 City staff evaluated the potential use of the erosivity waiver option allowed for within the Phase II Permit. The option was also presented to the Permit Stakeholders Committee for discussion and input. Both groups agreed that due to the limited applicability of the erosivity waiver within our jurisdiction, the option should not be included in the code amendments. Therefore, the City will not be allowing the erosivity waiver option for development projects within SeaTac.

## **Task 3. Plan review, inspection, and enforcement.**

### **Task 3.1. Evaluate plan review, inspection, and enforcement procedures and update, if necessary**

City staff evaluated existing plan review, inspection and enforcement procedures in 2009 and identified modifications necessary to meet the Phase II Permit requirements. These included modifications to:

- Creating erosion sedimentation control inspection and enforcement procedures;
- updating permit tracking fields; and
- updating permit approval notes to emphasize City’s right to access for stormwater maintenance inspections.

### **Task 3.2. Review and establish legal authority to inspect new facilities, if necessary**

The legal authority to conduct inspections on new development is granted during construction pursuant to the City's code SMC 12.10.180. City staff has also revised internal plan review and approval procedure to add notes to project approval citing the City authority to inspect stormwater facilities.

### **Task 3.3. Develop mechanism to track plan review, inspections, and enforcement actions**

The City's permitting process includes plan review, inspection and enforcement which meet the majority of the requirements of the permit. In 2009 City staff identified minor modifications needed to meet tracking requirements identified in the permit.

## **Task 4. Verify operation and maintenance (O&M) of post-construction BMPs**

### **Task 4.1 Review existing code for long-term O&M and update if necessary**

City staff reviewed existing code and policies and identified the following gaps which must be addressed to meet the requirements of the permit:

- Provide maintenance standards consistent with the permit;
- Adopt integrated pest and land management code or policies.

Subsequent to this gap analysis, City staff incorporated adoption of both maintenance standards and integrated pest and land management policies into the City of SeaTac Addendum to the KCSWDM, as identified in Task 2.1 of this section. These standards and policies go into effect on February 15, 2010 in compliance with the NPDES permit.

### **Task 4.2. Review current inspection program and update, if necessary**

City staff reviewed O&M inspection program and identified the following gaps which were addressed in 2009.

- Update O&M inspection tracking procedures to address:
  - spot check inspections,
  - annual inspections of public and private facilities,
  - catch basin inspections.

## **Task 5. Staff trained in plan review, inspections, and enforcement related to stormwater**

### **Task 5.1. Review current training program and identify additional training, if necessary**

City staff reviewed training needs for plan review and inspection staff in 2009. These training needs are identified as follows:

- Update plan review staff on changes to regulatory review requirement changes (i.e. adoption of 2009 KCSWDM);
- Train staff on changes to stormwater/erosion sedimentation control inspection and inspection tracking procedures; and
- Maintain erosion sedimentation control training for inspectors.

### **Task 5.2 Develop ongoing training program**

City staff have identified venues both in-house and through outside consultants to maintain training necessary to meet NPDES permit requirements.

### **Task 5.3 Develop mechanism to track training**

City staff are developing mechanisms to track training required under the permit.

## **Task 6. Reporting**

### **Task 6.1 Collate data/information for next year's annual report**

As anticipated, the City did not have an opportunity to initiate summary of plan review, inspection, and enforcement activities in 2009. Compliance with this section of the Permit is not due until 2/16/10.

### **Task 6.2 Identify annual report attachments and prepare if necessary.**

During the first quarter of 2009, the City identified what attachments are needed for the annual report covering 2008. A list of these attachments was prepared for internal use by City staff. The only attachment needed for the annual report is the SWMP document.

### **Task 6.3 Update SWMP document if necessary**

In the first quarter of 2009 City staff updated the SWMP document and submitted it to the Department of Ecology in compliance with the annual reporting deadline of March 31, 2009.

## **Task 7. Plan next year's runoff control activities**

In the third and fourth quarters of 2009 City staff planned for the implementation for the remaining requirements of this section.

## **6.4 PLANNED ACTIVITIES**

In addition to the City's existing procedures and practices for controlling stormwater runoff from new development, redevelopment, and construction sites, the City plans the following activities:

- Train/update development review and inspection staff on the regulatory and procedural changes going into effect as of the February 15, 2010 deadline.
- Implement regulatory and procedural changes as required under the permit (i.e. stormwater standards, inspection frequency and tracking requirements).
- Maintain ongoing training program for development review and inspection program.
- Complete and implement modifications to tracking procedures.
- Gather/collect data to meet annual reporting requirements.
- Summarizing the year's activities for the annual report including any required updates to the SWMP document.

## 7. POLLUTION PREVENTION & OPERATION AND MAINTENANCE



This section summarizes the Phase II Permit requirements for pollution prevention and operation and maintenance, describes existing pollution prevention and operation and maintenance activities the City has implemented, and identifies activities that the City plans to undertake in the future.

### 7.1 WHAT IS REQUIRED

Section S5.C.5 of the Phase II Permit requires the City to provide a Pollution Prevention and Operation and Maintenance Program for the area served by its MS4. The goal of the program is to prevent or reduce pollutant runoff from the City's operation and maintenance activities. The program should include:

- Maintenance standards that are at least as protective as those specified in the 2005 Stormwater Management Manual for Western Washington.
- An inspection program that includes all City-owned or operated permanent stormwater treatment, flow control facilities, and catch basins, at a frequency that meets the Phase II Permit requirements unless a reduced frequency can be justified.
- Spot checks of potentially damaged permanent treatment and flow control facilities, other than catch basins after major (greater than 24-hour-10-year recurrence interval rainfall) storm events.
- Practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads or highways owned or maintained by the City, and to reduce pollutants in discharges from all lands owned or maintained by the City.
- An ongoing training program for City staff whose construction, operations, or maintenance job functions may affect stormwater quality.
- Development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the City.
- Documentation of inspections, maintenance, or repair activities, as well as staff training.

### 7.2 EXISTING PROGRAM ACTIVITIES

The City has an active pollution prevention and operation and maintenance program implemented by

the City's Public Works Department. This program includes the following:

- Inspection Program  
The City has an inspection program for private systems, catch basins and inlets. Letters are sent to property owners early in the year offering City services and incentives. This includes annual inspection for parking lots, gas stations, car lots, and car washes. The remaining properties are inspected every other year. If cleaning is needed, the property is issued a 30-day notice letter to correct or the action is turned over to code enforcement. The City re-inspects the cleaned catch basins and inlets.
- Street Sweeping (provided by King County)
- Facility Maintenance
  - The City follows the 2005 King County Stormwater Design Manual standards for stormwater facility maintenance.
  - Facility maintenance of stormwater structures including vegetative control, structure repair, and sediment removal, as needed through the current inspection and complaint processes.
  - The City has a rate-credit system in place to support facility maintenance.
  - The Des Moines Creek Regional Detention Facility has developed a stand-alone Operation and Maintenance Manual (October 2007). This includes annual and emergency inspections, inspection checklists, and documentation.
  - The City responds to all stormwater-related complaints. Complaints are received by the City through the City's website, through emails, telephone calls, or in person.
  - Complaints are recorded and tracked through a Citizen Action Request Form. The City's maintenance department conducts an inspection, determines supplies/crew needed, and conducts a re-inspection.
  - City maintenance crews are responsible for hazardous material spills response. Though City crews are only responsible for spills within the right-of-way, they are often the first group to respond to spill complaints regardless of where they are located.
- City crews receive the following training:
  - Regional Road Maintenance ESA Training Program

### **7.3 ACCOMPLISHED ACTIVITIES**

The following table summarizes the program accomplishments of 2009.

**Table 7-1. Pollution Prevention and Operation and Maintenance Program:  
Accomplished Activities**

	Accomplished Activity	2009 by Quarter				Comments
		1	2	3	4	
1	Evaluate existing pollution prevention and operation and maintenance program			X	X	Annual review
2	Update inspection and maintenance program			X	X	Ongoing
3	Training of O&M staff	X	X	X	X	Ongoing
4	Stormwater Pollution Prevention Plans (SWPPPs)				X	Ongoing
5	Reporting					
5.1	Collate data/information for annual report					Not due until 2/16/10
5.2	Identify annual report attachments and prepare if necessary	X				
5.3	Update SWMP document if necessary	X				
6	Plan next year's PP and O&M activities				X	Ongoing

**Task 1 Evaluate existing Operations and Maintenance Program**

Staff continue to evaluate the existing Operations and Maintenance Program and update it to meet the requirements of the permit.

**Task 2 Update inspection and maintenance program**

In 2009 staff identified and began to implement changes to meet tracking requirements identified in the NPDES permit. Staff also initiated the adoption of the ESA Regional Road Maintenance Standards and integrated pest and land management policies to meet the permit requirements. These standards and policies were approved by City Council in December of 2009 and go into effect on February 15, 2010.

**Task 3 Training of Operation and Maintenance (O&M) staff**

The City initiated an ongoing training program to address NPDES permit requirements. O&M staff continue to be trained to the ESA Regional Road Maintenance Standards. Further, the City initiated IDDE training for all O&M staff in 2009.

**Task 4 Stormwater pollution prevention plans (SWPPP)**

City staff initiated the development of a SWPPP for its only heavy equipment and material storage facility (the SeaTac Maintenance Facility) in 2009. Staff anticipate completion and implementation of the SWPPP before the February 16, 2010 deadline.



## **Task 5 Reporting**

### **Task 5.1 Collate data for the annual report**

As anticipated, the City did not have an opportunity to gather and collate information on its pollution prevention and operations and maintenance activities in 2009. Compliance with this section of the Permit is not due until 2/16/10.

### **Task 5.2 Identify annual report attachments, if any**

During the first quarter of 2009, the City identified what attachments are needed for the annual report covering 2008. A list of these attachments was prepared for internal use by City staff. The only attachment needed for the annual report is the SWMP document.

### **Task 5.3 Update SWMP document if necessary**

The City updated the SWMP document to reflect the O&M activities.

## **Task 6. Plan PP and O&M activities and responsibilities**

In the third and fourth quarters of 2009 City staff planned for the implementation of the remaining requirements of this section.

## **7.4 PLANNED ACTIVITIES**

In addition to the City's existing pollution prevention and operation and maintenance program, the City plans the following activities:

- Implement updated tracking procedures for inspection and maintenance activities.
- Implement an updated inspection and maintenance program for all municipally owned or operated permanent stormwater treatment and flow control facilities, other than catch basins, in compliance with the permit.
- Implement updates to spot check inspection program, where O&M staff inspect potentially damaged permanent treatment and flow control facilities (other than catch basins) after major (greater than 24-hour-10-year recurrence interval rainfall) storm events.
- Continue on-going training program for O&M staff.