



## **Stormwater Management Program (SWMP)**

### **2011 Annual Report**

**Pursuant to the  
Western Washington  
NPDES Phase II  
Municipal Stormwater General Permit  
# WAR04-5011**

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## **BACKGROUND**

During the last few decades, regulatory organizations have come to recognize the extreme importance and value of our water resources. The United States began addressing water resources issues when industrial waste, untreated sewage and refuse were accumulating in our nation's waters at pollutant levels that posed dangers to public health.

In order to combat the high levels of pollutants entering our nation's waters, the Environmental Protection Agency (EPA) created the National Pollutant Discharge Elimination System (NPDES). This system of permitting requires that waste producers having direct discharges to surface waters go through an extensive permitting process to demonstrate that the impacts of respective industrial operations be minimized. The NPDES program has been expanded over the years to include Stormwater issues.

Jurisdictions with populations of 100,000 or greater have been required to go through the NPDES permitting process for a number of years. These larger cities and counties were included within what is called the NPDES Phase I program. Smaller jurisdictions such as the City of Lacey with populations between 10,000 and 100,000 residents are now required to have a Municipal Stormwater Permit as part of the NPDES Phase II program.

In the State of Washington, the Department of Ecology (DOE) has the delegated responsibility to implement NPDES requirements. As part of these requirements, each jurisdiction must develop and implement a comprehensive Stormwater Management Program (SWMP). DOE has created general compliance standards for SWMP's including:

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

The City of Lacey's initial NPDES Phase II Municipal Stormwater Permit was issued on January 17, 2007 and became effective on February 16, 2007. The permit was scheduled to expire on February 15, 2012, at which time a new permit was due to be issued. However, legislation passed in 2011 (ESHB 1478) extending the initial permit term until August 1, 2013, at which time the updated Phase II Permit will become effective.

## INTRODUCTION

This document is intended to comply with the requirements of the City of Lacey's NPDES Phase II Municipal Stormwater General Permit Number WAR04-5011.

The City's Stormwater Management Program (SWMP) includes activities and goals designed to protect and improve the quality of our surface water and groundwater resources by reducing negative impacts from our urban lifestyle. These goals include:

- Protect the health, safety and welfare of the public.
- Manage runoff from developed and newly developing properties.
- Mitigate the impacts of increased runoff due to urbanization.
- Manage stormwater and groundwater to minimize contact with pollutants.
- Manage stormwater to minimize flooding and erosion.
- Correct or mitigate existing water quality problems.
- Restore and maintain the biological, physical and chemical integrity of natural systems under the City's jurisdiction to protect beneficial uses.

This SWMP has been designed to reduce the discharge of pollutants from regulated small Municipal Separate Storm Sewer Systems (MS4s) to the maximum extent practicable (MEP), and meet the State's all known, available and reasonable methods of prevention, control and treatment (AKART) requirements, for the primary purpose of protecting water quality.

This document will be updated annually to include changes in the program. The public is encouraged to be involved in the development and updating of all aspects of this program.

Comments or questions can be directed to the City of Lacey Public Works Department, Water Resources Division at 360-491-5600 or e-mail [publicworks@ci.lacey.wa.us](mailto:publicworks@ci.lacey.wa.us) .

## **SECTION 1 – Compliance with Standards** (Permit Section S.4)

In accordance with RCW 90.48.520, the discharge of toxicants to waters of the State of Washington which would violate any water quality standard, including toxicant standards, sediment criteria and dilution zone criteria is prohibited. The required response to such violations is defined below.

### **1.1 Required response to violations of Water Quality Standards**

Pursuant to permit section G20 *Non-Compliance Notification of the Permit*, the City of Lacey shall notify Ecology in writing within 30 days of becoming aware that a discharge from the MS4 is causing or contributing to a violation of Water Quality Standards. For ongoing or continuing violations, a single written notification to Ecology will fulfill this requirement.

In the event that Ecology determines that a discharge from a municipal separate storm sewer is causing or contributing to a violation of Water Quality Standards in receiving waters, and the violation is not already addressed by a Total Maximum Daily Load or other water quality cleanup plan, Ecology will notify the Permittee in writing that:

1. Within 60 days of receiving the notification, or by an alternative date established by Ecology, the City shall review their Stormwater Management Program and submit a report to Ecology. The report shall include:
  - A description of the operational and/or structural Best Management Practices (BMPs) that are currently being implemented to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards, including a qualitative assessment of the effectiveness of each BMP.
  - A description of additional operational and/or structural BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards.
  - A schedule for implementing the additional BMPs including, as appropriate: funding, training, purchasing, construction, monitoring, and other assessment and evaluation components of implementation.

The City of Lacey shall implement the additional BMPs, pursuant to the schedule approved by Ecology, beginning immediately upon receipt of written notification of approval. The City shall also include with each subsequent annual report a summary of the status of implementation and any information from assessment and evaluation procedures collected during the reporting period.

## **SECTION 2 - Public Education and Outreach** (Permit Section S5.C.1)

Public education is a significant component of Lacey's comprehensive Stormwater Management Program. Lacey Water Resources has been conducting education and outreach activities related to stormwater management for many years. Efforts focus on educating the public to prevent pollutants from entering surface and groundwater and providing information to residents and developers concerning management of stormwater quantity and quality. These efforts have been coordinated with other local jurisdictions to make the best use of limited resources and to disseminate consistent messages.

In terms of the Stormwater Management Program components, the City has and will continue to meet the permit conditions. Existing programs will need to be refined or new ones created throughout this permit term.

### **2.1 Public Education and Outreach Requirements**

- Develop an education program aimed at residents, businesses, industries, elected officials, policy makers, planning staff and other employees of the Permittee. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.
- Each Permittee shall measure the understanding and adoption of the targeted behaviors among the targeted audiences. The resulting measurements shall be used to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors.
- Each Permittee shall track and maintain records of public education and outreach activities.

### **2.2 Public Education and Outreach Efforts**

The following section describes the current status of the City of Lacey stormwater management efforts as required by Section S5.C.1 of the Permit.

- General impacts are being addressed in many ways. Lacey utilizes a variety of avenues to disseminate information to the public including informational meetings, workshops, news releases, newspaper/newsletter articles, radio and television.



- The City of Lacey currently provides more than 20 different brochures covering all areas of stormwater management from flow control to streamside vegetation. They are used in conjunction with other activities to educate and invite the public to become involved in the protection of our environment.
- Lacey is member of the Stormwater Outreach for Regional Municipalities (STORM) Group. STORM is a coalition of cities and counties in the Puget Sound region, working together to address nonpoint pollution by advancing broad-scale behavior change among Puget Sound residents. The group is working to implement a Department of Ecology grant-funded regional awareness campaign as a foundation upon which jurisdictions can build more specific behavior-change programs.
- Since 1990, Lacey has benefited from the regional Stream Team Program as a tool for local outreach to local businesses and residents. Stream Team involves citizens in the protection and enhancement of our local water resources through education and action. Citizens learn about water quality through field classes and trainings, and then give back to the community through action projects. Stream Team volunteers contribute hundreds of hours annually to our community through monitoring, litter clean-ups, salmon and revegetation projects, storm drain marking, wildlife projects, and other activities. Stream Team is jointly funded by the storm and surface water utilities of the cities of Lacey, Olympia, Tumwater, and north Thurston County. In 2011, Stream Team volunteers contributed 393 hours of service to improving local streams.
- Lacey also facilitates volunteer projects for local non-profit groups in the area which all include an introduction to stormwater awareness, stormwater treatment and residential best management practices. Groups such as college classes, churches and military troops assist the City in removing invasive species, such as scotch broom, from our stormwater facilities. In 2011, these volunteer groups contributed 369 hours of service to improve stormwater facility function from City stormwater facilities.
- Project GREEN (Global Rivers Environmental Education Network) is a program sponsored by local jurisdictions, school districts, and individual teachers. GREEN teachers instruct students using a well-rounded curriculum aimed at many levels of watershed protection and understanding. Lacey signed a 5 year agreement in 2011 to participate in this program, and contributes \$12,000 annually. Lacey also provides resources, classroom presentations and field trips for GREEN teachers.

- Lacey Water Resources has a Pet Waste Awareness Program.
  - The neighborhood portion of the program provides signs and bag dispensers to all interested neighborhoods and apartment complexes within its service area. Signs and bag dispensers are mounted in areas of high pet use, educating and encouraging pet owners to pick up after their pets. The City is measuring the success of the program through surveys sent to the program participants. (See Section 2.3 below).
  - The resident portion of this program provides any resident in Lacey who signs the “Pet Poop Promise” a free “Bags on Board” portable pet waste bag dispenser, which attach to dog owners’ leashes. The dispensers say “Pick up for Puget Sound” and include the Puget Sound Starts Here website and Stream Team website, where residents can visit to learn more about stormwater pollution.
  
- The City participates in various public outreach events to reach different audiences to increase stormwater awareness and encourage best management practices as they relate to stormwater pollution and runoff. In 2011, the City participated in 6 different outreach events and reached an estimated 11,000 Lacey residents (see section 2.6 for more detail). Messages shared include: general stormwater awareness, residential stormwater BMPs, pet waste, vehicle leaks and natural yard care,
  
- In 2011, the City released its first annual stormwater utility newsletter, *The Wet Street Journal* and distributed it to 13,500 residential stormwater customers in Lacey. The newsletter included specific information about the Henderson Inlet Watershed, local water quality issues, best management practices, coupons for incentives to encourage reducing pollution sources and a kids’ page. The publication was well received by residents and a second annual edition is planned to be released in Fall 2012.
  
- Storm drain markers (or buttons) are applied to the curbs near storm drains in Lacey that read “No Dumping, Flows to Waterways” to educate residents walking by that the runoff entering storm drains flow to local waterways and that dumping is not allowed. Through efforts completed over the past several years, nearly all of Lacey’s existing storm drains are marked with these weather resistant buttons. The City’s 2009 Development Guidelines and Public Works Standards also requires that the curbs or roadways immediately adjacent to all newly installed storm drains are marked with the same buttons. In 2011, 78 storm drains were marked with the “No Dumping, Flows to Waterways” buttons.
  
- The City designed and printed 25 individualized stormwater facility educational signs to install at select public stormwater facilities across the City. The signs include the facility name, general information about stormwater, a simple graphic to illustrate how that particular facility functions, and a list of residential best management practices. The signs will be installed in 2012.

- Landscapes are being addressed in many ways such as offering free Naturescaping, Rain Gardens and Shoreline Restoration Workshops to residents and landscape professionals. These workshops provide information on utilizing appropriate native landscaping to improve water quality and reduce runoff.
- To prevent polluted runoff from charity car washes, the City, in coordination with other local jurisdictions, implemented a *Clean Cars, Clean Streams* Program to encourage local non-profit groups to either 1) hold their charity car washes at an approved site that receives treatment before being discharged to surface water or groundwater or 2) purchase commercial car wash tickets from the Puget Sound Car Wash Association. For car washes held in Lacey at approved sites, the City offers a car wash kit that groups can check out that includes advertising material, hose nozzles, buckets, sponges and bio-degradable car wash soap. The groups also provided the car wash recipients with information about protecting surface water from pollution associated with washing cars on impermeable surfaces. In 2011, 9 charity groups from Lacey purchased car wash tickets from the Puget Sound Car Wash Association, and another 6 groups hosted *Clean Cars, Clean Streams* charity car washes at approved Lacey locations.
- Buffers are being addressed through efforts by Lacey to protect the entire Woodland Creek corridor. This area is protected with 200-foot riparian buffers which are mandated by City ordinance. In addition, the City has acquired several parcels in the corridor. The result is that the entire creek within the city limits is now protected
- During recent years the City Council committed funds specifically for habitat enhancement in and around Woodland Creek. Funded projects include creating riffles and pools in Fox Creek in Lacey's Urban Growth Area (UGA), adding spawning gravels in Woodland Creek, removing concrete armoring from the stream channel at the outlet of Lake Lois, and numerous riparian re-vegetation projects. Each of these projects also provided educational opportunities for residents and school children. However, the primary benefits are that salmon now utilize the improved spawning areas, and there is more native vegetation along the shoreline.
- The Wellhead Protection Plan is intended to provide an overview of the extent of actions necessary to protect groundwater and to reduce risks to the City's water supply. It is also intended to be read in the context of on-going environmental protection and water resource planning activities by the City and County such as Stormwater Management, Groundwater Monitoring Program implementation, water system planning and development, and Growth Management Act (GMA) planning and implementation.
- Vehicle maintenance is being addressed with brochures and newsletter articles, to inform the public about maintenance activities and the effects of pollution on groundwater and surface water.

- In 2004 the City of Lacey passed Ordinance Number 1233 to bring the city into compliance with State law in regard to stormwater mitigation. A Private Facilities Inspection Program was developed to ensure private and city-owned stormwater facilities are being maintained properly. The program is designed to cover all possible effects on water quality. It is the City's intent to contact all property owners within the City of Lacey and provide guidance in the proper maintenance of their particular stormwater facilities. The inspector conducts informational meetings on-site to inform the owners about their storm system, performs an inspection of the site, notes all deficiencies, and provides a report outlining repairs needed. It also provides contact information for illicit discharges.
- Ordinance #1332 (Appendix B page-38) was adopted by City Council in 2009, updating Ordinance #1233 and Chapter 5a of the City of Lacey Development Guidelines. It outlines new minimum maintenance requirements, waste disposal, inspection procedures/authority, prohibited substances and enforcement policies as required by the permit.

### **2.3 Measuring Understanding** (Permit Section S5.C.1.b)

The City shall measure the understanding and adoption of the targeted behaviors among the targeted audiences. The resulting measurements shall be used to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors.

The City of Lacey has created programs to inform and involve the public on many different topics. The goal is adoption of desired behaviors therefore reducing pollution to the maximum extent practicable.

In 2011, the City of Lacey completed a behavior survey of the residents in its stormwater service area to collect baseline information about general awareness and current behaviors as they relate to stormwater runoff. The City is utilizing this information to identify gaps in basic awareness of stormwater and opportunities to encourage behavior change through stormwater education and outreach activities. This information will guide the City's education and outreach programs for the coming years. The survey will be repeated over the next 3-5 years to measure success and identify areas for improvement.

One specific program that has also been measured is the neighborhood pet waste stations program. The City provides pet waste stations (sign and dispenser) for free to Homeowners Associations (HOAs) and Apartment Complexes for the past several years. As part of this program, participants agree to maintain the station, including keeping the dispenser filled with bags for their residents. In September 2011, a survey of all currently installed pet waste stations was conducted. As each of Lacey's 91 existing stations was

visited, a visual inspection was completed, the actual location was mapped for GIS mapping purposes, and a photo was taken of each station. The visual inspection included noting whether the station was filled with bags at that point in time. 81 of the 91 stations were filled with bags, or 89%. In addition, a questionnaire is solicited from each pet waste station recipient 6 months following installation. One of the questions asks if the neighborhood has noticed a decrease in the amount of pet waste left on the ground, 90% reported that they noticed a decrease in pet waste left on the ground following installation of a station in their neighborhood. Since these two surveys show a very high compliance and satisfaction rate, the City has decided to continue the neighborhood pet waste station program as long as funding allows.

## **2.4 Tracking and Maintaining Records** (Permit Section S5.C.1.c)

All associated information is being tracked and recorded. In 2008 the City purchased NPDES tracking software to be used in conjunction with previously owned software to effectively track and maintain records of all NPDES related information.

## **2.5 Future Education and Outreach Activities**

The City of Lacey will need to continue evaluating and modifying the existing program throughout the permit cycle to achieve the best program possible, educating all audiences on the benefits of implementing existing BMPs and changes made to the program.

Actions recommended for continued compliance include:

- Continuing collaboration with other NPDES municipalities to identify appropriate program evaluation techniques.
- Implementing new or modifying existing education and outreach activities, including tracking and success monitoring.
- Further evaluate the understanding and adoption of target behaviors.
- Summarizing annual activities for the "Public Education and Outreach" components of the Annual Compliance Report, and identifying updates to the Stormwater Management Program document.

## **2.6 Outreach Activities Summary Sheet**

The following pages are a summary of the City of Lacey's Education and Outreach activities provided in 2011.

## 2011 Stormwater Education/NPDES Outreach Activities

SUMMARY			Stream Team/WIN VOLUNTEER HOURS	Other VOLUNTEER HOURS	Total hours volunteered
<b>Action Projects</b>	549	participants/volunteers	393	369	762
Education	11749	participants/people reached			
Media Outreach	36500	participants/people reached			
OTHER	12	New pet waste stations installed			
OTHER	1500	Portable pet waste dispensers distributed			
OTHER	78	storm drain markers installed			
OTHER	25	Educational signs for Storm Facilities			
OTHER	6	Clean Cars, Clean Streams Car Washes			
OTHER	12	Acres of stormwater facility improved			
OTHER	150	Trees and shrubs planted along streams			
OTHER	425	Feet of stream/riaprian area improved			



### Action Projects

Date	Event Name	Event Description	Topic/ Message	Target Group	Lacey Participants	Hours Volunteered
2/17/2011	SS Green WQ Monitoring	Assisted with collection of water quality samples at Woodland Creek. Provided presentation to each class about stormwater pollution sources in the area.	stormwater BMPs, Water Quality	Students-North Thurston School District	30	n/a
2/18/2011	SS Green WQ Monitoring	Assisted with collection of water quality samples at Woodland Creek. Provided presentation to each class about stormwater pollution sources in the area.	stormwater BMPs, Water Quality	Students-North Thurston School District	30	n/a
2/24/2011	SS Green Tree Planting	Planted 60 trees and shrubs with Mountain View Elementary School students (5th grade). Included presentation about the benefits of planting trees along streams.	Tree planting-stormwater BMPs	Students-North Thurston School District	29	58
4/5/2011	Tree Planting	Planted 50 trees and shrubs at WCCP with Lacey Parks Day Campers-gave quick presentation about stormwater pollution sources in the area	tree planting-stormwater BMPs	Students/Youth - Lacey area	50	75
5/21/2011	Win Project: Lacey Spring Fun Fair	Volunteer group assisted at our booth at the City's annual festival. Activities they assisted with included a pet poop toss game, free bags on board pet waste bag dispensers, general stormwater awareness, and salmon stampers painting activity	stormwater BMPs, general stormwater awareness, pet waste	WIN! Youth Cyclones Fastpitch	8	25
5/22/2011	Win Project: Lacey Spring Fun Fair	Volunteer group assisted at our booth at the City's annual festival. Activities they assisted with included a pet poop toss game, free bags on board pet waste bag dispensers, general stormwater awareness, and salmon stampers painting activity	stormwater BMPs, general stormwater awareness, pet waste	WIN! Youth Cyclones Fastpitch	9	24
5/31/2011	WIN Project: Storm Facility Maintenance	Volunteer group pulled invasive weeds from the Cabela's stormwater facility; included a presentation about stormwater, stormwater facilities, and stormwater pollution	stormwater BMPs, stormwater pond maintenance	WIN! Youth Pleasant Glade Elementary	36	66
6/2/2011	WIN Project: Storm Facility Maintenance	Volunteer group pulled invasive weeds from the Cabela's stormwater facility; included a presentation about stormwater, stormwater facilities, and stormwater pollution	stormwater BMPs, stormwater pond maintenance	WIN! Youth Pleasant Glade Elementary	35	66
6/8/2011	WIN Project: Storm Facility Maintenance	Volunteer group pulled invasive weeds from the College Regional Stormwater Facility; included a presentation about stormwater, stormwater facilities, and stormwater pollution	stormwater BMPs, stormwater pond maintenance	WIN! Youth Thurston Enterprises	16	40
6/14/2011	WIN Project: Storm Facility Maintenance	Volunteer group pulled invasive weeds from the Cabela's stormwater facility; included a presentation about stormwater, stormwater facilities, and stormwater pollution	stormwater BMPs, stormwater pond maintenance	WIN! Youth Girl Scouts	16	40
6/15/2011	WIN Project: Storm Facility Maintenance	Volunteer group pulled invasive weeds from the College Regional Stormwater Facility; included a presentation about stormwater, stormwater facilities, and stormwater pollution	stormwater BMPs, stormwater pond maintenance	WIN! Youth 4H	16	52

## Action Projects (continued)

Date	Event Name	Event Description	Topic/ Message	Target Group	Lacey Participants	Hours Volunteered
6/20/2011	WIN Project: Storm Facility Maintenance	Volunteer group pulled invasive weeds from the College Regional Stormwater Facility; included a presentation about stormwater, stormwater facilities, and stormwater pollution	stormwater BMPs, stormwater pond maintenance	WIN! Youth 4H	16	40
7/23/2011	LDS Church: Mulching & Watering trees	Adult and youth volunteers maintained existing trees at WCCP. Volunteers spread mulch and watered trees. Included a brief presentation on stormwater BMPs and the role of trees in reducing stormwater pollution, and the role of mulch to improve soil holding capacity.	tree planting maintenance, stormwater BMPs	Adults and Children: Lacey LDS Church	40	78
8/19/2011	WIN Project: Storm Facility Maintenance	Volunteer group pulled invasive weeds from the Cabela's stormwater facility; included a presentation about stormwater, stormwater facilities, and stormwater pollution	stormwater BMPs, stormwater pond maintenance	WIN! Youth Timberline DECA	13	40
8/28/2011	St Martin's College: Storm Facility Maintenance	Volunteer group pulled invasive weeds from the College Regional Stormwater Facility; included a presentation about stormwater, stormwater facilities, and stormwater pollution	stormwater BMPs, stormwater pond maintenance	College Students: St Martin's University	60	60
9/11/2011	St Martin's College: Storm Facility Maintenance	Volunteer group pulled invasive weeds from the College Regional Stormwater Facility; included a presentation about stormwater, stormwater facilities, and stormwater pollution	stormwater BMPs, stormwater pond maintenance	College Students: St Martin's University	31	62
10/20/2011	SS Green WQ Monitoring	Assisted with collection of water quality samples at Woodland Creek. Provided presentation to each class about stormwater pollution sources in the area.	stormwater BMPs, Water Quality	Students-North Thurston School District	30	n/a
10/21/2011	SS Green WQ Monitoring	Assisted with collection of water quality samples at Woodland Creek. Provided presentation to each class about stormwater pollution sources in the area.	stormwater BMPs, Water Quality	Students-North Thurston School District	30	n/a
11/29/2011	SS Green Field Day: Tree Planting	Planted 40 trees with Mountain View Elementary School students (5th grade). Included presentation about the benefits of planting trees along streams.	Tree planting-stormwater BMPs	Students-North Thurston School District	54	36
<b>TOTAL PARTICIPANTS</b>					<b>549</b>	<b>762</b>

## Education

Date	Event Name	Event Description	Topic/Message	Target Group	Lacey Participants
3/31/2011	STREAM TEAM: Naturescaping workshop	Co-sponsored a workshop to teach residents about planting a native water-wise landscape that includes methods for reducing erosion and runoff from their yards and gardens.	stormwater BMPs: general awareness, planting native landscapes, reducing erosion and runoff	general public	30
4/20/2011	Stormpond Workshop	Provided workshop for HOAs and property managers describing the requirements and tips for maintaining stormwater facilities in Lacey. 20 HOA's represented.	general stormwater awareness, stormwater BMPs, private stormpond maintenance	general public, HOAs, property managers	15
5/21/2011	Lacey Spring Fun Fair	Hosted booth at the City's annual festival. Included a pet poop toss game, free bags on board pet waste bag dispensers, general stormwater awareness, salmon stampers painting activity and stormwater plinko	stormwater BMPs, general stormwater awareness, pet waste	general public	3000
5/22/2011	Lacey Spring Fun Fair	Hosted booth at the City's annual festival. Included a pet poop toss game, free bags on board pet waste bag dispensers, general stormwater awareness, salmon stampers painting activity and stormwater plinko	stormwater BMPs, general stormwater awareness, pet waste	general public	2000
5/31/2011	School Presentation: Komachin Middle School	Provided 45 minute presentation to Komachin 8th graders. Included water cycle, stormwater awareness, pollution sources, erosion, LID and BMPs. Presentation included a pervious pavement demonstration.	stormwater BMPs, general stormwater awareness, pet waste, vehicle leaks, yard care and LID	Students: North Thurston School District	30
6/2/2011	School Presentation: Komachin Middle School	Provided 45 minute presentation to Komachin 8th graders. Included water cycle, stormwater awareness, pollution sources, erosion, LID and BMPs. Presentation included a pervious pavement demonstration.	stormwater BMPs, general stormwater awareness, pet waste, vehicle leaks, yard care and LID	Students: North Thurston School District	30
6/4/2011	STREAM TEAM: Sea Cinema	Hosted booths at the SEA Cinema, an environmental film festival. Stations set up where each station educated the public about different stormwater BMPs: car washing, pet waste, household cleaners and yard care.	stormwater BMPs, general stormwater awareness	general public	50

## Education (continued)

7/9/2011	Lacey Community Market: Home & Garden Day	Hosted booth at the City's community market. Information included natural yard care.	stormwater BMPs, natural yard care	general public	2000
8/2/2011	National Night Out Event: Horizon Pointe Neighborhood	Hosted booth at a large neighborhood festival. Information included natural yard care.	stormwater BMPs, natural yard care	general public: Horizon Pointe residents	500
8/13/2011	Lacey Community Market: Family Day	Hosted booth at the City's community market. Information included natural yard care and activities for kids: salmon stampers	stormwater BMPs, general stormwater awareness, natural yard care	general public	2000
9/10/2011	Lacey Community Market: Pet Day	Hosted booth at the City's community market. Information included pet waste and the pet poop toss. Also gave out bags on board pet waste bag dispensers.	stormwater BMPs, pet waste	general public	2000
9/18/2011	Henderson Inlet Watershed Tour	Hosted a watershed tour for Lacey residents. The tour bus started near the headwaters of Woodland Creek and ended at Henderson Inlet. The stops included woodland creek community park, the college storm facility, a bridge over woodland creek that used to be a culvert and concluded at the community shellfish farm.	stormwater BMPs, general stormwater awareness, watershed education, pet waste, yard care, shellfish protection	general public	40
11/29/2011	SS Green Field Day	Partnered with South Sound GREEN to take students to the headwaters of Woodland Creek and discussed land use and pollution, including pet waste and litter. Also included a scavenger hunt at Long's pond for native species and specific land uses.	stormwater BMPs, general stormwater awareness, pet waste, watershed education, land use impacts	Students-North Thurston School District	54
				TOTAL PARTICIPANTS	11749

## Media Outreach

Date	Event Name	Event Description	Topic/ Message	Target Group	Lacey Participants
May-December	Stormwater Fortune Cookies	Distributed at all outreach events, and to customers at City Hall	stormwater BMPs	general public	1000
April	Stream Team Newsletter	Coordinated the quarterly newsletter which includes IDDE articles, stormwater BMPs, and public participation opportunities	stormwater BMPs, stormwater awareness, public participation	general public	500
June-December	Intercity Transit Bus Ads	Ran Puget Sound Starts Here, "This...drains here" (stormwater drain, draining to Puget Sound) intercity transit bus ads on the sides, backs and interiors of buses that run routes all throughout Lacey and Thurston County.	stormwater awareness	general public	20000
July	Stream Team Newsletter	Coordinated the quarterly newsletter which includes IDDE articles, stormwater BMPs, and public participation opportunities	stormwater BMPs, stormwater awareness, public participation	general public	500
October	Stream Team Newsletter	Coordinated the quarterly newsletter which includes IDDE articles, stormwater BMPs, and public participation opportunities	stormwater BMPs, stormwater awareness, public participation	general public	500
November	Wet Street Journal	Created and mailed the City's first annual Stormwater Utility newsletter to all residential stormwater utility customers	stormwater awareness, stormwater BMPs, watershed education, public participation	general public	13500
December	Stream Team Newsletter	Coordinated the quarterly newsletter which includes IDDE articles, stormwater BMPs, and public participation opportunities	stormwater BMPs, stormwater awareness, public participation	general public	500
				TOTAL PARTICIPANTS	36500



## Other

Date	Program	Event Description	Topic/ Message	Target Group	# Items Installed
2011	Pet Waste Stations	Pet waste stations are provided to existing HOAs or apartment complexes with no up front costs to the participants; they are also now required to be installed in new residential developments	stormwater BMPs	HOAs and multifamily housing	12
2011	Bags on Board (pet waste bag dispensers)	Bags on Board, portable pet waste bag dispensers, are given out at outreach events and at the public works counter to participants who agree to sign the "pet poop promise".	pick up pet waste	general public	1500
2011	Stormdrain markers	stormdrain markers are installed in existing neighborhoods by volunteers; they are also now required to be installed at each catch basin in new developments	stormwater BMPs	general public	78
2011	City Stormwater Facility Educational Signs	Designed and printed 25 site specific educational stormwater signs for select City stormwater facilities. The signs educate the public about general stormwater awareness, pollution and how storm facilities function and contribute to improved WQ	general stormwater awareness, stormwater BMPs, WQ	general public	25
2011	Clean Cars, Clean Streams car washes	Provide car wash kits (buckets, sponges, Aboards, and biodegradable soap) to charity car wash groups who hold their car wash at approved city sites that receive treatment for stormwater. Also the groups hand out educational fliers to each car washed at their car wash.	stormwater BMPs, car washing	general public, charity car wash groups	6
2011	* Acres of City owned stormwater facility improved	This entry includes acres of land cleared during the stormwater pond maintenance projects. Number of volunteers and hours is included in the total under "action projects".	stormwater BMPs, stormwater pond maintenance, removing invasive species	WIN! Youth, general public, college students	12
2011	* Feet of stream restored or improved	This entry includes feet of stream improved during the tree planting projects. Number of volunteers and hours is included in the total under "action projects".	stormwater BMPs, tree planting, riparian zone importance	students, youth	425
2011	* Tree and Shrubs planted along streams	Trees and shrubs were planted at Woodland Creek Community Park (see action projects for more detail). Species planted include: roses, snowberry and Indian plum.	stormwater BMPs, tree planting, riparian zone importance	students, youth	150

\* This entry includes a separate set of data from the culmination of projects that are listed above under "action projects". The volunteers and number of hours will only be counted above under "action projects".

## **SECTION 3 - Public Involvement and Participation** (Permit Section S5C2)

### **3.1 Public Involvement and Participation Requirements**

The City is required to provide ongoing opportunities for public involvement through advisory boards and commissions, watershed committees, public participation in developing rate structures and budgets, stewardship programs, environmental activities or other similar activities. The public must be able to participate in the decision-making processes involving the development, implementation and update of the Program. Also, the City must make the SWMP document and Annual Compliance Report available to the public, including posting on the City's website.

### **3.2 Public Involvement and Participation Current Activities**

The most recent version of the SWMP document and Annual Compliance Report are posted on the City's website at [www.ci.lacey.wa.us/publicworks-library](http://www.ci.lacey.wa.us/publicworks-library) and will be updated accordingly. Comments on the SWMP will be given consideration, and subsequent editions will incorporate any appropriate suggestions. In this way, the SWMP will to some extent be a perpetual "work in progress" as it evolves through integration of revisions spawned by public comment, as well as new program components and progress toward program goals.

Comments on the SWMP will be given consideration, and subsequent editions will incorporate any appropriate suggestions. In this way, the SWMP will to some extent be a perpetual "work in progress" as it evolves through integration of revisions spawned by public comment, as well as new program components and progress toward program goals.

In 2011, the City provided a variety of public participation opportunities to the general public. The following is a list of those activities and a brief description of each.

#### **Storm Pond Maintenance Workshops**

All new developments in the City of Lacey are required to prepare a maintenance checklist and agreement for stormwater facilities that are filed with the deed to the property. In addition, residential developers are required to establish a homeowners association (HOA) with proper funding mechanisms to sustain community assets.

However, some of the older developments were not required to do this; thus, the residents are typically unprepared and most often unaware of their obligations for stormwater facility maintenance. To address this issue, Water Resources reaches out to HOAs that are not performing needed maintenance. Staff arranges meetings with the HOAs, provides copies of plans and maintenance guidelines, and conducts a walk-through of the respective community's stormwater facility(s). This process provides the impetus for HOAs to become better organized with respect to maintenance and also an opportunity to provide the City with recommendations for improving the inspection process.

Water Resources also offers annual workshops to HOAs, property managers, and landscape contractors that focus on stormwater facility maintenance. This workshop provides participants an opportunity to understand the maintenance and inspection process and provide input for how it could be improved.

### **Stream Team**

Stream Team is a regional volunteer program sponsored by Lacey, Olympia, Tumwater and Thurston County. The program manages a volunteer base of all ages who, in Lacey, participate in educational opportunities such as field classes, watershed tours and free workshops. In turn, participants contribute to action projects intended to protect or enhance surface waters within the region. Examples of Stream Team action projects in Lacey include re-vegetation along Woodland Creek, removing invasive species from stormwater facilities and water quality monitoring.

As part of the City's involvement in Stream Team, City staff contributes to the production of the quarterly newsletter by coordinating and editing the 16-page publication. The newsletter, distributed to nearly 4,000 Thurston County residents annually, includes invitations for the public to provide input on activities of the stormwater utilities of each jurisdiction, as necessary.

### **Comprehensive Planning**

Lacey Planning Commission consists of nine members, seven of whom must live within the City limits and two who may live within the urban growth boundary. This commission develops recommendations for long-range comprehensive planning goals and policies in the City of Lacey and areas outside of the City which may seek annexation.

The Comprehensive Land Use Plan is the City's comprehensive vision for development of the City over the next 20 years. It is the City's "long range plan." It consists of a series of text elements articulating goals and policies for various topic areas and a land use map. The City's Comprehensive Land Use Plan includes elements on land use, housing, transportation, utilities, capital facilities, environmental protection and resource conservation, and economic development. The land use map shows the entire Lacey Urban Growth Area (UGA) and designates properties for

particular categories of land uses. Thurston County and the City of Lacey developed the majority of the Plan as a cooperative “joint” effort. The land use, housing and utilities elements and the land use map were adopted by both jurisdictions in the same form. So, properties in the Lacey UGA, either in the incorporated City or unincorporated County, will be operating under the same Plan language and the same Plan map. Under the State’s Growth Management Act, amendments to the Plan can only be considered once each year, and must be considered at the same time to provide holistic comprehensive evaluation of proposed changes. The City requires a completed application to be submitted by January 2nd to be considered for that calendar year. All applications are required to go to the Planning Commission for a public hearing and evaluation. The Planning Commission recommends what action to take on each application and forwards the recommendations to the Lacey City Council for consideration and action by the end of July.

### **3.3 Public Involvement and Participation Future Activities**

Actions recommended for continued compliance include:

- Defining public involvement opportunities for the annual SWMP update and reporting process.
- Making the SWMP document and Annual Compliance Report available to the public by posting on the City of Lacey website.
- Summarizing annual activities for the "Public Involvement and Participation" component of the Annual Report, including updates to the SWMP.

### **3.4 Public Involvement and Participation Summary**

(Please See Summary on Page 12.)

## **SECTION 4 – Illicit Discharge Detection and Elimination (IDDE)**

(Permit Section S5.C.3)

### **4.1 IDDE Requirements**

Section S5.C.3 of the Permit requires the City to:

- Implement an ongoing Illicit Discharge Detection and Elimination (IDDE) program to detect and remove illicit discharges, illicit connections and improper disposal to the Stormwater system. An illicit discharge means “any discharge to a municipal storm system that is not composed entirely of Stormwater...” and illicit connection means “any man-made conveyance that is connected to a municipal storm system without a permit (excluding roof drains and other similar type connections) such as sanitary sewer connections, floor drains, etc.”
- Develop a storm infrastructure system map, have ordinances that prohibit illicit discharges, and create a program to detect and address illicit discharges.
- Publicly list and publicize a hotline or other local telephone number for public reporting of spills and other illicit discharges. Track illicit discharge reports and actions taken in response through close-out, including enforcement actions.
- Train Program staff on proper IDDE response procedures and processes and to recognize and report illicit discharges.
- Summarize all illicit discharges and connections reported to the City and response actions taken, including enforcement actions, in the Annual Compliance Report; including updates to the SWMP document.

### **4.2 IDDE Current Activities**

The City currently implements activities and programs that meet the Permit requirements. The current compliance activities associated with the above Permit requirements include:

#### **System Mapping**

The City currently maintains a stormwater infrastructure map in electronic format. It is continuously updated to include new development as well as changes made to existing facilities. Both public and private facilities are included in the storm system mapping.

## **Illicit Discharge Regulations**

The City of Lacey has had Ordinances No.791 and No.1233 in place for many years prohibiting the discharge of pollutants to the City's stormwater system, Ordinance No. 1332 updates these existing ordinances to reflect the new requirements. Discharges of waste to natural outlets is prohibited under Lacey Municipal Code Title 13, Water and Sewage, Chapter 13.08 (Use of Sewers – Private Sewage Disposal). Further, under Chapter 13.08.015, discharging polluting elements into the stormwater system is unlawful and subject to a fine of up to \$5,000. The purpose of these ordinances is to protect the receiving waters of the stormwater system.

Article 6 of Thurston County Code establishes a set of practices and procedures which protect the waters of Thurston County against nonpoint source pollution. It applies to all persons, activities and locations in Thurston County, and can be used to enforce against nonpoint pollutant sources that have the potential to enter stormwater systems. The intent of Article 6 is to enable protection of public health, protection and improvement of water quality, and protection of present and future uses of water.

## **Spill Response Program**

City publications, such as the annual stormwater utility newsletter, *The Wet Street Journal*, and the regional publication the *Stream Team Newsletter*, include information about the local spill response hotline. A webpage has been dedicated to this specific information about reporting spills: [www.ci.lacey.wa.us/report-a-spill](http://www.ci.lacey.wa.us/report-a-spill). The City's Street/Storm Maintenance Division responds to stormwater-related emergencies, primarily chemical spills and flooding events. In either situation, Division priorities are to protect human life, groundwater and the environment, and property, in that order. Local police and fire authorities contact the Division for flooding and spill events occurring within current City limits. The Stormwater crew will clean spills at City-owned facilities or where City systems discharge to another jurisdiction, and will assist private property owners with spills on their site to ensure the spill is remedied properly.

## **Pollutant Source Identification**

Pollutant source investigation in the case of spills and emergencies occurs through the mechanisms mentioned above. Pollutant sources also are tracked through long-term monitoring of surface and ground waters, as described below. Sources identified through monitoring and basin planning efforts as contributing to degraded water quality have been incorporated as priorities for capital improvement projects and mitigation efforts.

## **IDDE Training**

Three training sessions on Hazardous Materials refresher training for field staff was provide in 2011. A total of 42 employees received this training.

### **4.3 IDDE Tracking**

Stormwater personnel document incidents of emergency response in flood or spill reports. These reports help the Water Resources Division track problem flood areas and identify sources of spills in an effort to prevent future occurrences or contamination. In addition, the City is required to notify the Ecology Spill Response Team so that Ecology can track spills and ensure that they are properly addressed.

### **4.4 IDDE Future Activities**

The City of Lacey will continue to refine current efforts in order to protect our water ways, the environment and maintain compliance as Ecology phases in Permit requirements. Actions recommended for continued compliance include:

- Review and modify the IDDE Program as needed.
- Reviewing and updating codes.
- Reviewing and developing additional public education outreach and Standard Operating Procedures (SOPs) for minimizing pollutant releases from permitted non-stormwater discharges.
- Further developing and implementing a Stormwater Outfall Illicit Discharge screening program.
- Reviewing and revising upstream illicit discharge source control programs to respond to illicit discharges found and/or reported.
- Summarizing annual activities for the Illicit Discharge Detection and Elimination component of the Annual Report, including updates to the SWMP document.

## **SECTION 5 – Controlling Runoff from New Development, Redevelopment and Construction Sites**

### **5.1 Controlling Runoff Requirements**

Section S5.C.4 of the Permit requires the City to:

- Develop, implement, and enforce a program to reduce pollutants in stormwater runoff (i.e. illicit discharges) to the municipal separate storm system from new development, redevelopment and construction site activities. The program must apply to both private and

public projects, including roads, and address all construction or development-associated pollutant sources.

- Adopt regulations (codes and standards) and implement plan review, inspection, and escalating enforcement processes and procedures necessary to implement the program in accordance with Permit conditions, including the minimum technical requirements in Appendix 1 of the Permit (i.e., Ecology’s 2005 *Stormwater Management Manual for Western Washington*).
- Provide provisions, processes and procedures (plan review, inspection, and enforcement) to allow non-structural preventive actions and source reduction approaches such as Low Impact Development techniques (LID), measures to minimize the creation of impervious surfaces and measures to minimize the disturbance of native soils and vegetation.
- Adopt regulations (codes and standards) and provide provisions to verify adequate long-term operations and maintenance of new post-construction permanent stormwater facilities and best management practices (i.e. private drainage system inspections). In accordance with Permit conditions, this includes an annual inspection frequency and/or approved alternative inspection frequency, and maintenance standards for private drainage systems that are as protective as those in Volume V of the 2005 *Stormwater Management Manual for Western Washington*.
- Provide training to staff on the new codes, standards, processes and procedures and create public outreach and education materials.
- Develop and define a process to record and maintain all inspections and enforcement actions by staff for inclusion in the Annual Compliance Report.
- Summarize annual activities for the “Controlling Runoff” component of the Annual Compliance Report, and identify any updates to the Program document.

## **5.2 Controlling Runoff Current Activities**

The City currently has activities and programs that meet the Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The City has developed and implemented a program to reduce pollutants in stormwater runoff to the municipal separate storm system from new development, redevelopment and construction site activities. The City enforces this program through the 2010 City of Lacey Stormwater Design Manual.



- The City has existing programs, codes, standards, processes and procedures that address the Permit requirements for management of stormwater runoff from development, redevelopment, and construction sites.
- The City requires and completes construction and stormwater site inspections during pre- and post-construction phases.
- The City records and maintains inspections and enforcement actions by staff.
- The City will summarize associated activities in the Annual Compliance Report, including Program updates.

Prior to stormwater management regulations, stormwater management meant conveying the water away from a prospective project site. Under a series of ordinances adopting Lacey's *Development Guidelines and Public Works Standards*, the City of Lacey requires new development and redevelopment projects to meet specific development guidelines. Lacey's *Development Guidelines and Public Works Standards* specify criteria that must be met with regard to all forms of public works improvements.

Lacey's 2010 *Stormwater Design Manual* (SDM) contains minimum requirements for stormwater treatment, conveyance, storage and disposal. The Best Management Practices (BMPs) referenced in the SDM are consistent with Ecology's 2005 *Stormwater Management Manual for Western Washington*

The City of Lacey was the first in the state to adopt a low-impact development ordinance to encourage "zero effective drainage discharge." Recognizing that accepted methods for mitigating the impacts of increased stormwater run-off from development may not be the most appropriate approach to habitat protection, the City in 1999 adopted the Zero Effect Drainage Discharge ordinance (Ordinance 1113). This is an enabling ordinance that invites non-traditional approaches to plat development and allows justified exemptions from public works standards. Proposed "zero effect" proposals faced higher scrutiny during the review and approval process. No standards were specified through the codification of this ordinance, but under the ordinance, justified exemptions from public works standards are allowed. However, when determining whether an exemption is justified, the burden of proof is the responsibility of the project proponent.

The nature of the zero-effect idea is that it does not only allow exemptions from certain public works standards such as road width, but it may be challenged by State stormwater regulations. One way to ensure water quality compliance is to monitor the performance of the project using methods such as groundwater quality monitoring or downstream water quality monitoring. In fact, the Zero Effect Drainage Discharge ordinance requires the implementation of a monitoring program along with the project proposal.

One aspect of the zero effect drainage proposals that was not addressed through the ordinance is the issue of liability. The project owner or delineated responsible party would need a mitigation plan should the project stormwater system not function as designed or not provide proper water quality mitigation. The extent and details of this need are determined on a case-by-case basis.

Due at least in part to the lack of applicable standards and the uncertainties a developer faces in proposing a project under the Zero Effect Drainage Discharge ordinance, very few such proposals have been presented.

In 2006, the City of Lacey participated in the Low Impact Development (L.I.D.) Local Regulation Assistance Project with staff from Puget Sound Action Team and AHBL. The goal of this project was to develop draft regulatory changes, standards and other recommendations to encourage the increased use of L.I.D. One of the findings of this project was that Lacey's Zero Effect Drainage Discharge ordinance could be improved through clearer design objectives, more specific requirements, and flexibility within native vegetation retention requirements. From this project, in 2007 the City was delivered recommended amendments or modifications to the Lacey Municipal Code and to the Public Works Standards for establishment of L.I.D. practices and techniques.

### **Inspection and Enforcement**

Investigations and inspections are made to check on complaints concerning compliance. These investigations can lead to enforcement actions that will ensure compliance with regulations. Enforcement actions are based on the nature of the violation, the damage or risk to the public or public resources, and/or the degree of cooperation shown by the person subject to the enforcement.

Basic maintenance guidelines and erosion control standards are included in Lacey's 2010 *Stormwater Design Manual*. In addition to public education and outreach efforts that provide information regarding compliance with stormwater standards, Lacey Water Resources coordinates with other City divisions to monitor and enforce compliance of stormwater and erosion control systems.

Public Works has several full-time employees whose responsibility is to inspect and enforce development plans, including erosion control compliance. Water Resources staff coordinated with the City's Building Department to extend the inspection activities for erosion control. The City's Building Inspectors are regularly on project sites after the initial public works improvements are completed. However, the building inspectors are not specifically tasked with erosion control inspection and enforcement. The building inspectors have attended erosion control training and notify Public Works inspectors of non-compliance issues.

## 5.3 Controlling Runoff Future Activities

The City of Lacey has a program to help reduce stormwater runoff from new development and construction sites, but updates will be necessary to maintain compliance as Ecology phases in Permit requirements. Actions that are recommended for continued compliance include:

- Updating codes and standards to reflect the 2010 *Stormwater Design Manual*.
- Updating the *Stormwater Design Manual* as needed.
- Developing standardized plan review, inspection, enforcement and compliance documentation and tracking processes and procedures.
- Conducting staff training and public education and outreach on implementing the 2010 *Stormwater Design Manual*.
- Revising and adopting post-construction private drainage system maintenance standards for new approved facility types.
- Supporting Ecology by distributing copies of the Notice of Intent forms for Construction Activity and Industrial Activity.
- Revising information management systems to track and report construction, new development and redevelopment permits, inspection and enforcement actions and Private Drainage Inspection Program inspections and enforcement actions.
- Summarizing annual activities for the “Controlling Runoff from New Development, Redevelopment, and Construction Sites” component of the Annual Report (including the post-construction private drainage system inspection and maintenance requirements), and including updates to the SWMP document.

## SECTION 6 – Pollution Prevention and Operation and Maintenance for Municipal Operations

### 6.1 Operation and Maintenance Requirements

Section S5.C.5 of the Permit requires the City to:

- Develop and implement an operations and maintenance (O&M) program with the ultimate goal of preventing or reducing pollutant runoff from municipal separate stormwater system and municipal operations and maintenance activities.

- Establish maintenance standards for the municipal separate stormwater system that are at least as protective as those specified in Ecology’s 2005 *Stormwater Management Manual for Western Washington*.
- Perform required inspection frequency of stormwater flow control and treatment facilities and catch basins, unless previous inspection data show that a reduced frequency is justified.
- Have processes and procedures in place to reduce stormwater impacts associated with runoff from municipal operation and maintenance activities, including but not limited to 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.
- Train staff to implement the modified processes and procedures and document that training.
- Prepare and maintain Stormwater Pollution Prevention Plans (SWPPPs) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the City.
- Summarize annual activities for the “Pollution Prevention and Operations and Maintenance for Municipal Operations” component of the Annual Compliance Report, including any updates to the SWMP document.

## **6.2 Operation and Maintenance Current Activities**

One of the most important aspects of effective stormwater management is a proper operations and maintenance program. Regular maintenance is the only method to ensure storm system integrity and continued water quality enhancement. The City of Lacey has a maintenance staff dedicated to stormwater system maintenance. Their responsibilities are quite broad and include catch-basin inspection and cleaning, street sweeping, facility cleaning and maintenance, spill response and control, and flooding response and repair where applicable. During 2011, City forces responded to 137 spill incidents.

One necessity for any operations and maintenance program is a complete and accurate inventory of infrastructure. New development is required to supply accurate as-built drawings that are added to the City’s system maps. However, some systems were developed outside the City’s jurisdiction or existed prior to development standards. Thus, there are many private storm systems in existence that are not properly mapped.

The City has been divided into a number of maintenance areas to optimize the cleaning and maintenance schedule. The City’s aggressive maintenance schedule has an inspection and cleaning goal for each of the City’s 4,624 catch basins. The City also owns and maintains 56 stormwater

ponds, as well as a variety of other associated structures. These facilities often require repair and vegetation management.

Operation and maintenance of Lacey's Stormwater systems is conducted by the Stormwater Division of the Transportation Maintenance Department of the City's Public Works Operations. The City currently has activities and programs that meet the Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The development and implementation of the City of Lacey Stormwater Pollution Prevention Plan.
- Conducting an operations and maintenance (O&M) program with the ultimate goal of minimizing pollutant runoff from municipal operations.
- Maintaining standard operating procedures (SOPs) to reduce stormwater impacts associated with runoff from municipal operation and maintenance activities including but not limited to streets, parking lots, and roads owned or maintained by the City. These procedures address such potential sources as utility installation, street cleaning, ditch maintenance and other City activities.
- Providing Ongoing O&M training.

During rainy periods, concerned residents and business owners often notify the City's Street/Stormwater Maintenance Division of minor flooding problems. The Division responds to stormwater-related problems, including plugged grates, failed facilities and localized flooding. The Division keeps records of problem areas and facilities and attempts to perform maintenance and correct problems each year before the storm season begins. For storm related emergencies, local police and fire authorities contact the Division for flooding occurrences within current City limits, at city owned facilities or where City systems discharge to another jurisdiction or to private property.

### **6.3 Operation and Maintenance Future Activities**

The City of Lacey performs many activities to limit stormwater pollution potential related to its municipal operations and maintenance program. However, updates will be necessary to maintain compliance as Ecology phases in Permit requirements. Actions recommended for continued compliance include:

- Updating inspection, operation and maintenance processes and procedures for City owned or operated stormwater catch-basins, flow control and treatment facilities.
- Administratively adopting standards equivalent to Ecology's maintenance standards for City-performed maintenance activities.
- Summarizing annual activities for the "Pollution Prevention and Operations and Maintenance" component of the Annual Report, including updates to the SWMP document.

## **SECTION 7 - Monitoring** (Permit Section S8)

### **7.1 Monitoring Requirements**

Section S8 of the Permit does not require municipalities to conduct water quality sampling or other testing during this initial Permit term, with the following exceptions:

- Water quality monitoring required for compliance with TMDLs [total maximum daily pollutant loads, a.k.a., water quality clean-up plans]; currently, not applicable to the City of Lacey because none of the TMDL cleanup plans developed for waterbodies in Lacey were completed and approved at the time of permit issuance. It is likely that TMDL-related monitoring will be required in the next permit term, and the City will be planning to address this.
- Any sampling or testing required for characterizing illicit discharges pursuant to the Program's Illicit Discharge Detection and Elimination conditions.
- Preparation for future, comprehensive, long-term water quality monitoring efforts consistent with current Phase I monitoring requirements. According to the Permit, this program would include two components: general stormwater quality monitoring and targeted Stormwater Management Program effectiveness monitoring. The stormwater monitoring is intended to characterize stormwater runoff quantity and quality at a limited number of locations. This characterization would allow for analysis of pollutants and changes in conditions over time and across the City. The Stormwater Management Program effectiveness monitoring is intended to improve stormwater management efforts by evaluating various stormwater controls. Results of the monitoring will be used to support the adaptive management process for improving programs over time.

## **7.2 Monitoring Current Activities**

### **Interlocal Monitoring Program**

For several years, the City of Lacey has participated in an Interlocal Cooperation Agreement with Thurston County and the Cities of Olympia and Tumwater, for a Water Resource Monitoring Program that focuses on monitoring streams. The Interlocal Monitoring Program components include stream flow monitoring, precipitation monitoring, macro invertebrate monitoring, ambient water quality monitoring, NPDES Phase II monitoring, and special projects. All of the monitoring stations are outside of Lacey city limits, and consequently represent cumulative impacts from at least two, and sometimes more, jurisdictions that oversee stormwater management.

### **Local Stormwater Monitoring Program**

In the past, the City's in-house Stormwater Monitoring Program has included nine sites along the City's main drainage course, Woodland Creek. Objectives of the monitoring effort included establishing a baseline level of contaminants found in Lacey's stormwater, identifying priority areas for mitigation, and measuring the effectiveness of treatment facilities. Staffing and resource constraints made implementation of the monitoring program a substantial challenge. Consistent data from this effort does not exist due to personnel and equipment limitations.

In an effort to improve the value of the data collected and to design a feasible monitoring program, monitoring objectives have been revisited and revised. Past data collection has provided information to establish a baseline for many of the outfalls within the Woodland basin and basin planning efforts have identified priorities in terms of needed treatment facilities. Therefore, the current focus of the monitoring program is to gather data on pollutant loading to better assess the effectiveness of the existing Woodland Creek and Ruddell Road stormwater treatment facilities. Monitoring sites may be rotated in the future to allow for assessment of new treatment facilities as they come on-line. Data on physical and chemical parameters is gathered, including flow rate, BOD, TDS, TSS, temperature, pH, conductivity, DO, nitrate, nitrite, phosphorous, chromium, copper, lead, zinc, petroleum hydrocarbon, oil and grease, and fecal coliform. Improved stormwater monitoring is a priority of the Water Resources Division.

## **Volunteer Stream Monitoring Program**

Stream Team volunteers collect benthic macro invertebrates from Woodland Creek for lab analysis once a year. There are plans to conduct statistical analysis on the data collected over the past 6-7 years to identify changes in water quality trends.

South Sound GREEN (described in more detail on Page 9) 5<sup>th</sup> grade students also collect water quality samples from Woodland Creek and associated lakes and tributaries from various points in the watershed twice a year. Data gathered include: pH, temperature, DO, BOD, TSS, turbidity and fecal coliform. With City staff facilitation, this data is evaluated by the students at an annual Student Congress, and recommendations are compiled from the students for how people living in the watershed can change their behavior to improve the quality of the surface waters in the troubled areas. This list of recommendations is shared with Environmental Educators across the watershed.

## **Groundwater Monitoring**

Groundwater is the primary source of Lacey's drinking water supply. As part of Lacey's water system compliance, wellhead protection programs, both source wells and test wells, are monitored regularly for water level and water quality parameters.

Water level monitoring provides information on seasonal and long-term trends in water levels and direction of lateral and/or vertical groundwater flows between aquifers. Water quality monitoring of source wells ensures compliance with groundwater and drinking water quality standards.

Data collected from wellhead protection monitoring wells located at the edge of 1-year time-of-travel zones serve as an "early warning" system to signal potential contamination before it is detected in source wells. Some of the 120 parameters monitored as part of these wellhead monitoring programs include conductivity, turbidity, hardness, pH, inorganic compounds, volatile organic compounds, synthetic organic chemicals, bacteria and microorganisms. Results of monitoring data collected from source wells are reported to the public in the annual consumer confidence report titled "Drinking Water Report."

## **Monitoring Conducted in 2011**

The City of Lacey monitored Woodland Creek monthly at the downstream City limit, at a point that represents the downstream impacts of land uses within the city. Monitored parameters include flow, FC bacteria, nitrate, turbidity, temperature, conductance, pH, DO (dissolved oxygen) and TDS (total dissolved solids). The City also monitored flow at the outlet of the Woodland



Creek Stormwater Treatment Facility, to track occurrences and durations of discharge from the facility directly to Woodland Creek.

In the past, Lacey's stormwater monitoring activities focused on characterizing contaminants in untreated discharges, as well as evaluating the effectiveness of stormwater treatment facilities that discharge directly to creeks. In the past few years, most focus has been on stormwater discharges within the Woodland Creek and Woodard Creek basins. Treatment facilities have since been constructed to treat stormwater before it discharges to these creeks. Treatment effectiveness has been evaluated from samples collected during a few storm events, but currently Lacey has no established routine stormwater monitoring program. In the 2012 Lacey will be collecting stormwater samples to update its characterizations of treatment facility effectiveness, and will use these data to develop a stormwater monitoring program as required under the Phase II permit.

Lacey has been monitoring Woodland Creek at the city limit monthly since the year 2000 and has no plans to stop. Lacey Stream Team volunteers also collect macro invertebrate samples from Woodland Creek at the same station, and the data are used to evaluate the biological integrity of the site. These samples are collected annually, an activity that is expected to continue.

In 2009, Lacey purchased monitoring and sampling equipment (e.g. a compositor) and safety gear to begin a stormwater sampling program, we will still need to contract with at least one certified laboratory for stormwater analyses, and consult with neighboring jurisdictions on whether the City and Thurston County should coordinate stormwater sampling in the Chambers and Woodland Creek basins, and whether Lacey and Olympia should coordinate sampling in the Woodard Creek basin.

There is currently monitoring coordination and data sharing with other local jurisdictions, and we generally know who to contact if we need more information. However, individual monitoring activities are not currently planned to complement each other. For shared facilities (e.g. the Fones Road Stormwater Facilities) or for areas with multiple authorities (e.g. the Woodland Creek basin, where the county has most of the authority at the mouth and headwaters), there could be room for improving coordination.

The City of Lacey is preparing to implement a comprehensive long-term monitoring program. The monitoring program will include two components: stormwater monitoring and targeted Stormwater Management Program (SWMP) effectiveness monitoring. Stormwater monitoring is intended to characterize stormwater runoff quantity and quality to track changes in conditions over time. Stormwater program effectiveness monitoring is intended to improve stormwater management efforts by evaluating activities effectiveness on stormwater quality. The results of the monitoring program will be used to support the adaptive management process and lead to refinements of the SWMP.

Monitoring for the program will focus on inlets into the stormwater facility, and the discharge that drains to Woodland Creek. Data analysis will also include comparisons with water quality data collected prior to the construction of the stormwater facility.

This will target two monitoring objectives:

1. to collect data relative to Lacey's street sweeper program and evaluate whether the program reduces the need for maintenance at stormwater facilities, monitoring will evaluate the amount of material that is removed from catch basins in two areas: one that is part of the street sweeping program, and one that is not. A subset of sediment samples will be analyzed for common contaminants.
2. to evaluate Lacey's outreach efforts on private storm ponds, we will collect sediment samples from approximately 5 ponds that have received maintenance outreach from Lacey. In addition, 2-3 unmaintained ponds will be sampled for comparison.

Samples will be tested for Fecal Coliform, Total Suspended Solids, Oil/Grease (total recoverable), Total Petroleum Hydrocarbons (total recoverable), Total Kjeldahl Nitrogen, Ammonia, Nitrate, Total Phosphorus, Zinc, Copper and Lead.

### **7.3 Monitoring Future Activities**

The City will need to implement a Water Quality Monitoring Program to maintain compliance as Ecology phases in current and future Permit requirements. The City will:

Implement the monitoring compliance strategy, including expanding the monitoring plans as necessary to implement the following Permit requirements and activities:

- Illicit Discharge Detection and Elimination Program outfall screening.
- Pollutant spill response (a.k.a., illicit discharge response) monitoring.
- Continued participation with Thurston County and the cities of Olympia and Tumwater monitoring work group.
- Summarize annual monitoring activities for the annual compliance report, including updates to the SWMP document.

## **Appendix A**

The Following pages contain stormwater management-related policies, ordinances and regulations to consider for overall compliance.

### **Federal, State and City of Lacey Regulations**

#### FEDERAL REGULATIONS

- ▶ Clean Water Act – including:
  - compliance with state water quality standards for discharges of stormwater
  - NPDES Phase II Municipal Stormwater Permit requirements
  - Implementation of the Total Maximum Daily Load (TMDL) for the Henderson Inlet watershed
  - compliance with Section 404 filling of wetlands
- ▶ Endangered Species Act

#### STATE REGULATIONS AND PROGRAMS

- ▶ State Environmental Policy Act (SEPA) review of City actions, per RCW 43.21C.120 and the SEPA rules, WAC 197-11-904
- ▶ Growth Management Act
- ▶ Department of Ecology's *Stormwater Management Manual for Western Washington*
- ▶ Department of Fish & Wildlife Hydraulic Project Approval (HPA)
- ▶ Water Quality Standards for discharges, per WAC 200, Chapter 90.48 RCW
- ▶ Underground Injection Control Program (UIC), per WAC 173-218

#### CITY OF LACEY POLICIES, CODES AND ORDINANCES

- ▶ Lacey Municipal Code (LMC), including the Titles and Chapters listed on the following page
- ▶ Lacey Development Guidelines & Public Works Standards
- ▶ Lacey Stormwater Design Manual

Lacey Municipal Code  
Titles and Chapters Affecting the  
Stormwater Management Program

**Title 12 STREETS AND SIDEWALKS**

Chapter 12.28 Development Standards and Public Works Standards

**Title 13 WATER AND SEWAGE**

Chapter 13.08 Use of Sewers--Private Sewage Disposal  
Chapter 13.70 Storm and Surface Water Utility Charges

**Title 14 BUILDINGS AND CONSTRUCTION**

Chapter 14.23 Design Review  
Chapter 14.24 Environmental Policy  
Chapter 14.26 Shoreline Master Program  
Chapter 14.28 Wetlands Protection  
Chapter 14.30 Removal of Topsoil  
Chapter 14.31 Zero Effect Drainage Discharge  
Chapter 14.32 Tree and Vegetation Protection and Preservation  
Chapter 14.33 Habitat Conservation Areas Protected  
Chapter 14.34 Flood Hazard Prevention  
Chapter 14.36 Critical Aquifer Recharge Areas Protection  
Chapter 14.37 Geologically Sensitive Areas Protection

**Title 16 Zoning**

Chapter 16.52 Environmentally Sensitive Areas

The following states statutes and administrative regulations should be reviewed in conjunction with this Chapter to ensure that all state requirements are satisfied:

A. Revised Code of Washington (RCW)

**Title**  
43.20 Drinking Water  
70.95 Dangerous and Solid Waste

70.105	Dangerous Waste, MTCA, Sediment Standards
90.48	Ground Water, Surface Water, Sediment
90.54	Ground Water
90.70	Sediment

B. Washington Administrative Code (WAC)

**Title**

173-200	Water Quality Standards for Ground Waters of the State of Washington
173-201	Water Quality Standards for Surface Waters of the State of Washington
173-216	State Waste Discharge Permit Program
173-220	National Pollutant Discharge Elimination
173-204	Sediment Management Standards
173-303	Dangerous Waste Regulations
173-304	Minimum Functional Standards for Solid Waste Handling
173-340	The Model Toxics Control Act Cleanup Regulation
246-290	Public Water Supplies

**5A.180 Violation deemed misdemeanor**

Any violation of the provisions of this Chapter as adopted is a misdemeanor.

## **Appendix B**

### **Ordinance # 1332**

The following is the update (Ordinance No.1332) to Chapter 5 of the City of Lacey *Development Guidelines and Public Works Standards*.

#### **CHAPTER 5**

#### **STORMWATER MAINTENANCE CODE**

##### **5.010 Purpose**

The provisions of this Chapter are intended to:

- A. Provide standards and procedures for inspection, maintenance, and repair of stormwater facilities in Lacey to help contribute to an effective and functional stormwater system.
- B. Comply with Washington Department of Ecology (Ecology) and Puget Sound Water Quality Authority (PSWQA) regulations and requirements for local governments.
- C. Authorize the Lacey Stormwater Utility to require that stormwater facilities be inspected, maintained, and repaired in conformance with this Chapter.
- D. Establish the minimum level of compliance, which must be met.
- E. Guide and advise all who conduct inspection, maintenance, and repair of stormwater facilities.
- F. Prevent harmful materials from leaking, spilling, draining, or being dumped into any public or private stormwater system.
- G. Provide a method of enforcement for compliance with this Chapter.

##### **5A.020 Definitions**

For the purpose of this Chapter, the following definitions apply:

- A. AKART – All Known, Available, and Reasonable methods of prevention, control, and Treatment. See also the State Water Pollution Control Act, sections 90.48.010 RCW and 90.48.520 RCW.

- B. “Best management practice” or “BMP” means physical, structural, and/or managerial practices that, when used singly or in combination, prevent or reduce pollution of stormwater. BMP’s are listed and described in the Stormwater Management Manual.
- C. “Director” means the Public Works department director and/or designees.
- D. “Ground Water” means water in a saturated zone or stratum beneath the surface of the land or below a surface water body.
- E. “Harmful materials” are substances that may create a public nuisance or constitute a hazard to humans, animals, fish or fowl, or any solid, dangerous, or extremely hazardous waste, as defined by the Chapter 173-304 of the Washington Administrative Code (WAC) or Chapter 173-303 WAC. “Harmful materials” also include substances that, when released into the environment, may cause non-compliance with the following Chapters of the Washington Administrative Code: 246-290, 173-200, 173-201, 173-204, and/or 173-340.
- F. “Hyperchlorinated” means water that contains more than 10mg/Liter chlorine.
- G. “Illicit Discharge” means any direct or indirect non-stormwater discharge to the city’s storm drain system, except as expressly allowed by this chapter.
- H. “Illicit connection” means any man-made conveyance that is connected to a municipal separate storm sewer without a permit, excluding roof drains and other similar type connections. Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system.
- I. “Municipal separate storm sewer system (MS4)” means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):
  - a. Owned or operated by the City of Lacey;
  - b. Designed or used for collecting or conveying stormwater;
  - c. Which is not part of a Publicly Owned Treatment Works (POTW). “POTW” means any device or system used in treatment of municipal sewage or industrial wastes of a liquid nature which is publicly owned; and
  - d. Which is not a combined sewer. “Combined sewer” means a system that collects sanitary sewage and stormwater in a single sewer system.
- J. “National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit” means a permit issued by the Environmental Protection Agency (EPA) (or by the Washington Department of Ecology under authority delegated pursuant to 33 USC Section 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

- K. “Non-stormwater discharges to the stormwater system” are discharges to any portion of the public or privately owned stormwater system that are not composed entirely of rainfall or snow melt. Examples may include, but are not limited to, sanitary wastewater, laundry wastewater, non-contact cooling water, vehicle wash wastewater, radiator flushing wastewater, spills from roadway accidents, and improperly disposed motor oil, solvents, lubricants, and paints.
- L. “Person” means any individual, partnership, corporation, association, organization, cooperative, public or Municipal Corporation, agency of the state or local governmental unit, however designated.
- M. “Pollutant” means anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes and solvents; oil and other automotive fluids; nonhazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.
- N. “Premises” means any building, lot, parcel of land, or portion of land, whether improved or unimproved, including adjacent sidewalks and parking strips.
- O. “Stormwater” means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, channels, or pipes into a defined surface water channel or a constructed infiltration facility.
- P. “Stormwater facility” means a constructed component of a stormwater system, designed or constructed to perform a particular function or multiple functions. Stormwater facilities include, but are not limited to, pipes, swales, ditches, culverts, street gutters, detention basins, retention basins, constructed wetlands, infiltration devices, catch basins, oil/water separators, and sediment basins. Stormwater facilities are described in the Stormwater Management Manual. “Stormwater facility” includes both public and privately owned facilities.
- Q. “Stormwater Management Manual” or “Manual” means the Stormwater Management Manual for Western Washington prepared by the State Department of Ecology and dated February 2005 or any other technically equivalent manual.
- R. “Stormwater system” means constructed and natural features which function together as a system to collect, convey, channel, hold, inhibit, retain, detain, infiltrate, divert, treat, or filter stormwater. “Stormwater system” includes both public and privately owned features.



**5A. 030      Maintenance Requirements**

All stormwater facilities in the City of Lacey, both public and private, shall be maintained according to this Chapter, maintenance guidelines specific to the stormwater facility, and the Minimum Maintenance Requirements and Standards of the Manual.

**5A. 040      Minimum Requirements**

- A. All stormwater facilities shall be inspected at regular intervals and maintained and repaired as needed to comply with: Section 5A.080 of this Chapter, the approved designs for stormwater facilities, stormwater permits which may be issued by the City of Lacey, the State Department of Ecology or the Environmental Protection Agency (EPA), applicable construction standards, and the minimum requirements as stated in the Stormwater Management Manual.
- B. All stormwater facilities shall be inspected by the City on a periodic basis, as described in Section 5A.080. If, during an inspection, a facility is found to not be in compliance with Section 5A.080, all subsequent inspection and maintenance intervals shall be scheduled more frequently if determined by the City to be necessary in order to assure future compliance.

**5A. 050      Disposal of waste from maintenance activities**

- A. Disposal of waste from maintenance activities shall be conducted in accordance with Chapters 173-304 and 173-303 of the WAC, the State Department of Ecology guidelines for disposal of waste materials from stormwater maintenance activities, and the Stormwater Management Manual.
- B. In addition to any of the above mentioned existing regulations and guidelines, the Stormwater Utility may develop additional requirements for handling and disposal of waste generated from maintenance activities within Lacey which, upon adoption, shall also apply. Additional requirements shall be placed in the Stormwater Management Manual.

**5A. 060      Compliance required**

Unless otherwise specified by agreement, property owners are responsible for the maintenance, operation, and repair of stormwater systems and BMP's within their property. Property owners shall maintain, operate, and repair these facilities in compliance with the requirements of this Chapter and the Stormwater Management Manual.

**5A. 070      Inspection authority**

During routine maintenance inspections to determine compliance with the provisions of Section 5A.080 or whenever there is cause to believe that a violation of the Chapter has been or is being committed, the City is authorized to inspect during regular working hours and at other reasonable times, all stormwater systems within Lacey to determine compliance with the provisions of this Chapter.

**5A. 080      Inspection and Minimum Maintenance Requirements**

These maintenance standards are intended to give support and guidance to all persons and property owners who must comply with the Drainage Design and Erosion Control Manual. All privately owned stormwater systems shall be maintained by the owner at his/her expense. The City of Lacey Public Works will complete and file a status report with the property owner or his/her designee after inspections have been completed. The minimum requirements listed herein will be subject to review and revision by the City on an annual basis in January.

- A. All parts of privately owned stormwater systems shall be maintained and/or restored to assure performance as designed and intended. All physical parts of the stormwater system shall be repaired and maintained per the City of Lacey, Development Guidelines and Public Works Standards, Stormwater Section, Appendix K and any guidelines specific to the respective facility.
- B. Stormwater system modifications or major repairs must be reviewed and approved by the City of Lacey prior to implementation. This is required to ensure that the intent of the originally approved stormwater system is achieved. The City may require the property owner to submit detailed drawings and/or specifications regarding proposed modifications and/or repairs.
- C. The City may require either partial or complete cleaning of a stormwater system whenever a prohibited substance (see item 9, this section) is found to be present in a stormwater system.
- D. A licensed, bonded, and insured contractor must accomplish all maintenance of privately owned stormwater systems except for normal vegetation maintenance facilities.
- E. All State and Federal confined space entry regulations and requirements must be followed.
- F. All maintenance work shall be completed in accordance with Section 5A.040.

- G. All privately owned pipes, catch basins, manholes, inlets, ditches, swales/bioswales, detention/retention systems, vaults, water quality facilities, flow control oil/water separators, sedimentation ponds, and stream channels located on (or running through) commercial properties, multi-family developments, private plats, and private short plats shall be inspected every three (3) years by the City and/or property owner and shall be maintained by the property owner.
- H. At a minimum, the following stormwater system maintenance shall be required:
1. Pipes and piped detention/retention systems, which are 10% or more obstructed, must be cleaned. Catch basins, manholes, and inlets must be cleaned when accumulation of material in the catchment reaches a volume of 60% capacity (the volume from the bottom of the structure to the bottom of the outfall pipe).
  2. All surface inlets must be cleared of leaves and debris so that they can readily accept water.
  3. All surface areas must be maintained to ensure runoff can flow directly to the catch basin as designed and approved.
  4. Ditches, swales/bioswales, detention/retention ponds, sedimentation ponds, vaults, and water quality facilities shall be cleaned and/or obstructions removed when flow is impeded; and/or the capacity of the ditch, swale, or water quality facility has been reduced by 20% or more.
  5. Flow control oil/water separators shall be maintained when sediment/debris reaches a volume of 20% capacity or visible oil sheen is found to be present.
  6. Constructed stream channels shall be cleaned and/or have obstructions removed when flow is impeded and/or the capacity has been reduced by 20% or more.
  7. Unstable and eroding stream channels and sedimentation ponds shall require maintenance and/or repair.
  8. Vegetation in and around the facility shall be maintained to prevent any impedance to performance of the system. Because the presence of vegetation can be both integral to water quality treatment and aesthetics, facility owners are expected to maintain established, healthy vegetation.
- I. Prohibited Discharges. The following materials/substances will not be allowed to enter any surface or sub-surface part of the public and/or private stormwater system. All listed prohibited materials shall be stored, handled and disposed of in a manner that will prevent

them from entering any part of the public, private stormwater system, or groundwater system:

- All non-stormwater discharges to the stormwater system, unless such discharges are authorized in accordance with Chapter 173-216 of the Washington Administrative Code. (WAC) (*State Waste Discharge Permit Program*) or Chapter 173-220 WAC (*National Pollutant Discharge Elimination System Permit Program*).
- Any solid, dangerous, or extremely hazardous waste, as defined by Chapters 173-304 WAC (*Minimum Functional Standards for Solid Waste Handling*) or Chapter 173-303 WAC (*Dangerous Waste Regulations*).
- Any substance that, when released into the environment, may cause non-compliance with Chapters 246-290 WAC (*Public Water Supplies*); 173-200 WAC (*Water Quality Standards for Ground Waters of the State of Washington*), 173-201 WAC (*Water Quality Standards for Surface Waters of the State of Washington*), 173-204 WAC (*Sediment Management Standards*); or 173-340 WAC (*The Model Toxics Control Act Cleanup Regulation*).
- Petroleum products including, but not limited to oil, gasoline, grease, fuel oil and heating oil.
- Trash and debris
- Chemicals and/or paint
- Animal waste
- Steam cleaning waste
- Uncured concrete wash water (generated during cleaning, finishing or during exposure of aggregate).
- Laundry wastes or other soaps
- Pesticides, herbicides or fertilizers
- Sewage
- Heated water
- Degreasers and/or solvents
- Bark or other fibrous or organic material
- Antifreeze and/or other automotive products
- Animal carcasses or any portion thereof
- Earth in quantities which cause violation of State water quality standards.
- Acids,alkalis, or bases
- Recreational vehicle wastes
- Dyes unless prior permission has been granted by the Director
- Construction materials and residues
- Wash water, sediment, and debris from street sweeping and street washing
- Metals in either particulate or dissolved form
- Flammable or explosive materials
- Radioactive material
- Batteries

- Drain cleaners
- Swimming pool or spa filter backwash
- Recreational vehicle waste
- Food wastes
- Lawn clippings, leaves, or branches
- Chemicals not normally found in uncontaminated water.

J. Allowable Discharges. The following types of discharges shall not be considered illegal discharges for the purposes of this chapter unless the director determines that the type of discharge, whether singly or in combination with others, is causing or is likely to cause pollution of surface water or groundwater:

- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration – as defined in 40 CFR 35.2005(20).
- Uncontaminated pumped ground water
- Foundation drains
- Air conditioning condensation
- Irrigation water from agricultural sources that is commingled with urban stormwater
- Springs
- Water from crawl space pumps
- Footing drains
- Flows from riparian habitats and wetlands
- Discharges from emergency fire fighting activities.

K. Conditional Discharges. The following types of discharges shall not be considered illegal discharges for the purposes of this chapter if they meet the stated conditions, or unless the director determines that the type of discharge, whether singly or in combination with others, is causing or is likely to cause pollution of surface water or groundwater:

1. Potable water, including water from water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be de-chlorinated to a concentration of 0.1 ppm or less, pH-adjusted, if necessary and in volumes and velocities controlled to prevent re-suspension of sediments in the stormwater system;
2. Lawn watering and other irrigation runoff are permitted but shall be minimized;
3. De-chlorinated swimming pool discharges. These discharges shall be de-chlorinated to a concentration of 0.1 ppm or less, pH-adjusted, if necessary and in volumes and velocities controlled to prevent re-suspension of sediments in the stormwater system;
4. Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents are permitted if the amount of

street wash and dust control water used is minimized. At active construction sites, street sweeping must be performed prior to washing the street;

5. Non-stormwater discharges covered by another NPDES permit, provided, that the discharge is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations; and provided, that written approval has been granted for any discharge to the storm drain system;
6. Other non-stormwater discharges. The discharges shall be in compliance with the requirements of a stormwater pollution prevention plan (SWPPP) reviewed and approved by the city or county which addresses control of such discharges by applying AKART to prevent contaminants from entering surface or ground water.

L. Prohibition of Illicit Connections

1. The construction, use, maintenance, or continued existence of illicit connections to the storm drain system is prohibited.
2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
3. A person is considered to be in violation of these provisions if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

**5A. 090 Inspection Procedures**

- A. Inspection procedures will be maintained and updated as necessary in the “Private Stormwater Facilities Inspection Program” standard operating procedure within Public Works Operations.
- B. Prior to making any inspections on private property that has no dedicated access easements to the City; the inspector shall present identification credentials, state the reason for the inspection, and request entry.
- C. If the property or any building or structure on the property is unoccupied, the inspector shall first make a reasonable effort to locate the owner or other person(s) having charge or control of the property or portions of the property and request entry.
- D. If after reasonable effort the inspector is unable to locate the owner or other person(s) having charge or control of the property and has reason to believe the condition of the stormwater system creates an immediate hazard to persons or property, the inspector may enter the property.
- E. Unless entry is consented to by the owner or person(s) in control of the property or portion of the property, conditions are reasonably believed to exist which create imminent hazard, or an access easement to the storm facility was dedicated to the City, the inspector shall obtain a search warrant prior to entry as authorized by the laws of the State of Washington.

- F. The inspector may inspect the stormwater system without obtaining a search warrant provided for in Subsection D, provided the inspection can be conducted while remaining on public property or other property on which permission to enter is obtained.

**5A. 100 Inspection and maintenance records**

Owners of storm drainage systems will be required to provide the City with all existing inspection, maintenance, and repair records, as well as any record drawings or diagrams that they may have for their storm drainage systems when requested.

**5A. 110 Enforcement authority**

The City of Lacey is obligated to monitor and enforce water quality standards in conformance with the Clean Water Act of 1972. In addition, the State Department of Ecology requires a public as well as a private stormwater inspection and maintenance program under the DPDES phase II program. The City or its designee shall administer and enforce this Chapter and shall have the authority to adopt and implement administrative procedures for such enforcement.

**5A. 120 Enforcement policy**

- A. Where maintenance and repair is found necessary to correct health or safety problems, to control harmful materials entering the stormwater system, or to remove harmful materials that have entered the stormwater system, such work shall be completed by the owner or operator of the stormwater system or stormwater facility within twenty-four (24) hours of notification of the person or entity responsible for maintenance of the non-compliance. When maintenance and repair is found necessary to prevent water quality degradation, such work shall be completed within seven (7) calendar days of notification, unless there is a severe water quality hazard, in which case such work shall be completed immediately. Other related problems, maintenance, or repairs shall be completed within thirty (30) calendar days of notification of the person or entity responsible for such maintenance of the non-compliance.
- B. In the event a valid response is not received nor the violations corrected, a second letter describing the violations shall be sent in accordance with the procedures set forth above. This second notice shall allow fourteen (14) calendar days for abatement of the violation, or a valid response, to negotiate a schedule as noted in Subsection A, above.
- C. Failure to abate the violation or negotiate a schedule as noted in Subsection B, above within fourteen (14) calendar days of the issuance of the second letter shall be deemed a misdemeanor.

### **5A. 130        Orders**

The City shall have the authority to issue to an owner or person(s) representing an owner an order to maintain or repair a component of a stormwater facility or BMP to bring it into compliance with this Chapter, the Stormwater Management Manual, and/or other City regulations. The order shall include:

- A.     A description of the specific nature, extent and time of the violation, and the damage or potential damage that reasonably might occur.
- B.     A notice that the violation or the potential violation cease and desist, and in appropriate cases, the specific corrective action to be taken.
- C.     A reasonable time to comply, in conformance with Section 13.66.040 of the Lacey Municipal Code. However, in the event the violation is reasonably believed to create an imminent hazard the City shall have the authority to issue an emergency cease and desist order. Such order shall require immediate compliance with the provisions of this chapter by halting operations and/or terminating discharges.
- D.     Penalties may be incurred by any owner of a stormwater system not in compliance with this Chapter.
- E.     An order to the owner to provide to the City a detailed plan which may include drawings and steps that will be taken to achieve compliance within a specified time. This plan is subject to approval by the City.

### **5A. 140        Penalty for violations**

- A. Persons Subject to Penalty. Any person who violates or fails to comply with the requirements of this Chapter or who fails to conform to the terms of an approval or order issued by the City may be charged with a misdemeanor. Each day of continued violation shall constitute a separate violation for purposes of this penalty.
- B. Aiding and Abetting. Any person who, through an act of commission or omission, aids or abets in the violation shall be considered to have committed a violation of the Chapter, and be subject to enforcement action.
- C. Re-inspection Fees. In addition to the penalties to be imposed, the City may impose a re-inspection fee for any account or storm drainage facility found to be not compliance with this Chapter. This inspection fee shall be independent of any current or future penalties that may be incurred by the property owner for noncompliance with this Chapter.
- D. Disconnection from the MS4. Illicit connections, illicit discharges, or continued failure of the property owner to comply with the provisions of this chapter may result in disconnection from the MS4.



**5A. 150 Severability**

If any portion of this Chapter or its application to any person, entity, or circumstance is held invalid, the remainder of this Chapter or the application of the provision to other persons, entities, or circumstances shall not be affected.

**5A. 160 Abrogation and restrictions**

It is not intended that this Chapter repeal, abrogate, or impair any existing regulations, easements, covenants, or deed restrictions. However, where this Chapter imposes greater restrictions, the provisions of this Chapter shall prevail.

**5A. 170 State statutes and regulations**

## **Appendix C**

### **General Conditions**

#### **G1. DISCHARGE VIOLATIONS**

All discharges and activities authorized by this Permit shall be consistent with the terms and conditions of this Permit.

#### **G2. PROPER OPERATION AND MAINTENANCE**

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control to achieve compliance with the terms and conditions of this Permit.

#### **G3. NOTIFICATION OF SPILL**

If a Permittee has knowledge of a spill into a municipal storm sewer which could constitute a threat to human health, welfare, or the environment, the Permittee shall notify the Ecology regional office and other appropriate spill response authorities immediately but in no case later than within 24 hours of obtaining that knowledge. Spills which might cause bacterial contamination of shellfish, such as might result from broken sewer lines, shall be reported immediately to the Department of Ecology and to the Department of Health, Shellfish Program. The Department of Ecology's regional office 24-hour number is (425)649-7000 for NWRO and (360)407-6300 for SWRO and the Department of Health's shellfish 24-hour number is (360)236-3330.

#### **G4. BYPASS PROHIBITED**

The intentional bypass of Stormwater from all or any portion of a Stormwater treatment BMP whenever the design capacity of the treatment BMP is not exceeded, is prohibited unless the following conditions are met:

A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act (CWA); and

B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated Stormwater, or maintenance during normal dry periods.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

## **G5. RIGHT OF ENTRY**

The permittee shall allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law at reasonable times:

- A. To enter upon the Permittee's premises where a discharge is located or where any records must be kept under the terms and conditions of this Permit;
- B. To have access to, and copy at reasonable cost and at reasonable times, any records that must be kept under the terms of the Permit;
- C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the Permit;
- D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and
- E. To sample at reasonable times any discharge of pollutants.

## **G6. DUTY TO MITIGATE**

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this Permit which has a reasonable likelihood of adversely affecting human health or the environment.

## **G7. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

## **G8. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in the Permit shall be construed as excusing the Permittee from compliance with any other applicable federal, state, or local statutes, ordinances, or regulations.

## **G9. MONITORING**

### **A. Representative Sampling:**

Samples and measurements taken to meet the requirements of this Permit shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

**B. Records Retention:**

The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the application for this permit, for a period of at least five years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Ecology. On request, monitoring data and analysis shall be provided to Ecology.

**C. Recording of Results:**

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

**D. Test Procedures:**

All sampling and analytical methods used to meet the monitoring requirements in this permit shall conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136, unless otherwise specified in this permit or approved in writing by Ecology.

**E. Flow Measurement:**

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.

**F. Lab Accreditation:**

All monitoring data, except for flow, temperature, conductivity, pH, total residual chlorine, and other exceptions approved by Ecology, shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, Chapter 173-50 WAC. Soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by Ecology.

**G. Additional Monitoring:**

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

## **G10. REMOVED SUBSTANCES**

With the exception of decant from street waste vehicles, the Permittee shall not allow collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of Stormwater to be resuspended or reintroduced to the storm sewer system or to waters of the state. Decant from street waste vehicles resulting from cleaning Stormwater facilities may be reintroduced only when other practical means are not available and only in accordance with the Street Waste Disposal Guidelines in Appendix 4.

## **G11. SEVERABILITY**

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

## **G12. REVOCATION OF COVERAGE**

The director may terminate coverage under this General Permit in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC. Cases where coverage may be terminated include, but are not limited to the following:

- A. Violation of any term or condition of this general permit;
- B. Obtaining coverage under this general permit by misrepresentation or failure to disclose fully all relevant facts;
- C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- D. A determination that the permitted activity endangers human health or the environment, or contributes significantly to water quality standards violations;
- E. Failure or refusal of the permittee to allow entry as required in Chapter 90.48.090 RCW;
- F. Nonpayment of permit fees assessed pursuant to Chapter 90.48.465 RCW;

Revocation of coverage under this general permit may be initiated by Ecology or requested by any interested person.

### **G13. TRANSFER OF COVERAGE**

The director may require any discharger authorized by this General Permit to apply for and obtain an individual permit in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC.

### **G14. GENERAL PERMIT MODIFICATION AND REVOCATION**

This General Permit may be modified, revoked and reissued, or terminated in accordance with the provisions of WAC 173-226-230. Grounds for modification, revocation and reissuance, or termination include, but are not limited to the following:

- A. A change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this General Permit;
- B. Effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of dischargers covered under this General Permit;
- C. A water quality management plan containing requirements applicable to the category of dischargers covered under this General Permit is approved; or
- D. Information is obtained which indicates that cumulative effects on the environment from dischargers covered under this General Permit are unacceptable.
- E. Changes in state law that reference this permit.

### **G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION**

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation and reissuance under Condition G12, G14, or 40 CFR 122.62 must report such plans, or such information, to Ecology so that a decision can be made on whether action to modify, or revoke and reissue this Permit will be required. Ecology may then require submission of a new or amended application. Submission of such application does not relieve the Permittee of the duty to comply with this Permit until it is modified or reissued.

### **G16. APPEALS**

- A. The terms and conditions of this General Permit, as they apply to the appropriate class of dischargers, are subject to appeal within thirty days of issuance of this General Permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- B. The terms and conditions of this General Permit, as they apply to an individual discharger, are appealable in accordance with chapter 43.21B RCW within thirty days of the effective date of

coverage of that discharger. Consideration of an appeal of General Permit coverage of an individual discharger is limited to the General Permit's applicability or nonapplicability to that individual discharger.

C. The appeal of General Permit coverage of an individual discharger does not affect any other dischargers covered under this General Permit. If the terms and conditions of this General Permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

D. Modifications of this Permit are appealable in accordance with chapter 43.21B RCW and chapter 173-226 WAC.

### **G17. PENALTIES**

40 CFR 122.41(a)(2) and (3), 40 CFR 122.41(j)(5), and 40 CFR 122.41(k)(2) are hereby incorporated into this Permit by reference.

### **G18. DUTY TO REAPPLY**

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

### **G19. CERTIFICATION AND SIGNATURE**

All applications, reports, or information submitted to the Department shall be signed and certified.

A. All permit applications shall be signed by either a principal executive officer or ranking elected official.

B. All reports required by this Permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Department, and

2. The authorization specifies either an individual or a position having responsibility for the overall development and implementation of the Stormwater management program. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under condition G19.B.2 is no longer accurate because a different individual or position has responsibility for the overall development and implementation of the Stormwater management program, a new authorization satisfying the

requirements of condition G19.B.2 must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this Permit shall make the following certification:

“I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that Qualified Personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations.”

## **G20. NON-COMPLIANCE NOTIFICATION**

In the event the Permittee is unable to comply with any of the terms and conditions of this permit, including discharges from the Permittees MS4 which may cause a threat to human health or the environment, the Permittee shall:

A. Take appropriate action to correct or minimize the threat to human health or the environment or otherwise stop or correct the condition of noncompliance.

B. Notify Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance.

C. Notify Ecology immediately in cases where the Permittee becomes aware of a discharge from the Permittee’s MS4 which may cause or contribute to an imminent threat to human health or the environment.

## **G21. UPSETS**

Permittees must meet the conditions of 40 CFR 122.41(n) regarding “Upsets.” The conditions are as follows:

A. Definition. “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

B. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (C) of this condition are met. Any determination made during administrative review of



claims that noncompliance was caused by upset, and before an action for noncompliance, will not constitute final administrative action subject to judicial review.

C. Conditions necessary for demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and that the Permittee can identify the cause(s) of the upset;
2. The permitted facility was at the time being properly operated; and
3. The Permittee submitted notice of the upset as required in 40 CFR 122.41(1)(6)(ii)(B) (24-hour notice of noncompliance).
4. The Permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate).

E. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

## Appendix D

### Glossary of Acronyms and Definitions

The following acronyms and definitions are adapted from the Phase II Permit and are reproduced here for the reader's convenience.

**AKART** means all known, available, and reasonable methods of prevention, control and treatment.

**All known, available and reasonable methods of prevention, control and treatment** refers to the State Water Pollution Control Act, Chapter 90.48.010 and 90.48.520 RCW.

**Applicable TMDL** means a TMDL which has been approved by EPA on or before the issuance date of this Permit, or prior to the date that the Permittee's application is received by Ecology, or prior to a modification of this Permit, whichever is later.

**Beneficial Uses** means uses of waters of the states which include but are not limited to use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.

**Best Management Practices** ("BMPs") are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by the Department that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

**BMP** means Best Management Practice.

**Bypass** means the diversion of Stormwater from any portion of a Stormwater treatment facility.

**Common plan of development or sale** means a site where multiple separate and distinct construction activities may be taking place at different times on different schedules, but still under a single plan. Examples include: phased projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g. a development where lots are sold to separate builders); a development plan that may be phased over multiple years, but is still under a consistent plan for long-term development; and projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility. If the project is part of a common plan of development or sale, the disturbed area of the entire plan shall be used in determining permit requirements.

**Component** or **Program Component** means an element of the Stormwater Management Program listed in S5 Stormwater Management Program for Cities, Towns, and Counties or S6 Stormwater Management Program for Secondary Permittees of this permit.

**Co-permittee** means an operator of a regulated small MS4 which is applying jointly with another applicant for coverage under this permit. A co-permittee is an owner or operator of a regulated small MS4 located

within or adjacent to another regulated MS4. A co-permittee is only responsible for complying with the conditions of this permit relating to discharges from the MS4 the co-permittee owns or operates. See also 40 CFR 122.26(b)(1)

**CWA** means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

**Detailed Implementation Plan** means the formal implementation plan for a Total Maximum Daily Load (TMDL) or water quality clean-up plan.

**DIP** means Detailed Implementation Plan.

**Director** means the Director of the Washington State Department of Ecology, or an authorized representative.

**Discharge** for the purpose of this permit means, unless indicated otherwise, any discharge from a MS4 owned or operated by the permittee.

**Entity** means another governmental body, or public or private organization, such as another permittee, a conservation district, or volunteer organization.

**Equivalent document** means a technical Stormwater management manual developed by a state agency, local government or other entity that includes the Minimum Technical Requirements in Appendix 1 of this Permit. The Department may conditionally approve manuals that do not include the Minimum Technical Requirements in Appendix 1; in general, the Best Management Practices (BMPs) included in those documents may be applied at new development and redevelopment sites, but the Minimum Technical Requirements in Appendix 1 must still be met.

**40 CFR** means Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

**General Permit** means a permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

**Ground water** means water in a saturated zone or stratum beneath the surface of the land or below a surface water body.

**Heavy equipment maintenance or storage yard** means an uncovered area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are washed or maintained, or where at least five pieces of heavy equipment are stored.

**Hydraulically Near** means runoff from the site discharges to the sensitive feature without significant natural attenuation of flows that allows for suspended solids removal. See Appendix 7 Determining Construction Site Sediment Damage Potential for a more detailed definition.

**Hyperchlorinated** means water that contains more than 10 mg/Liter chlorine. Disinfection of water mains and appurtenances requires a chlorine residual of 10 mg/L at the end of the disinfection period. This level is well above the Maximum Residual Disinfectant Level of an annual average of 4 mg/Liter chlorine for potable water.

**Illicit connection** means any man-made conveyance that is connected to a municipal separate storm sewer without a permit, excluding roof drains and other similar type connections. Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system.

**Illicit discharge** means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

**Large Municipal Separate Storm Sewer System** means all municipal separate storm sewer systems located in an incorporated place with a population of 250,000 or more, a county with unincorporated urbanized areas with a population of 250,000 or more according to the 1990 decennial census by the Bureau of Census.

**Low Density Residential Land Use** means, for the purpose of permit section S8 Monitoring, one unit per 1-5 acres.

**Low Impact Development (LID)** means a Stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic pre-development hydrologic functions.

**Major Municipal Separate Storm Sewer Outfall** means a municipal separate storm sewer outfall from a single pipe with an inside diameter of 36 inches or more, or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive Stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 12 acres or more).

**Material Storage Facilities** means an uncovered area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.

**Maximum Extent Practicable (MEP)** refers to paragraph 402(p)(3)(B)(iii) of the federal Clean Water Act which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.

**Medium Municipal Separate Storm Sewer System** means municipal separate storm sewer systems located in an incorporated place with a population of more than 100,000 but less than 250,000, or a county with unincorporated urbanized areas of more than 100,000 but less than 250,000 according to the 1990 decennial census by the Bureau of Census.

**MEP** means Maximum Extent Practicable.

**MTRs** means Minimum Technical Requirements.

**Municipal Separate Storm Sewer System (MS4)** means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(i) owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.

(ii) designed or used for collecting or conveying Stormwater.

(iii) which is not a combined sewer; and (iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

**National Pollutant Discharge Elimination System (NPDES)** means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

**Notice of Intent (NOI)** means the application for, or a request for coverage under this General Permit pursuant to WAC 173-226-200.

**Notice of Intent for Construction Activity** and **Notice of Intent for Industrial Activity** mean the application forms for coverage under the *Baseline General Permit for Stormwater Discharges Associated with Industrial Activities*.

**Outfall** means point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the State and does not include open conveyances connecting two municipal separate storm sewer systems, or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.

**Permittee** unless otherwise noted, the term “Permittee” includes Permittee, Co-Permittee, and Secondary Permittee, as defined below:

(i) A “Permittee” is a city, town, or county owning or operating a regulated small MS4 applying and receiving a permit as a single entity.

(ii) A “Co-Permittee” is any operator of a regulated small MS4 that is applying jointly with another applicant for coverage under this Permit. Co-Permittees own or operate a regulated small MS4 located within or adjacent to another regulated small MS4.

(iii) A “Secondary Permittee” is an operator of regulated small MS4 that is not a city, town or county.

**Physically Interconnected** means that one MS4 is connected to a second MS4 in such a way that it allows for direct discharges to the second system. For example, the roads with drainage systems and municipal streets of one entity are physically connected directly to a MS4 belonging to another entity.

**Pollutant Generating Impervious Surfaces (PGIS)** are surfaces considered to be significant sources of pollutants in Stormwater runoff. Such surfaces include those that are subject to vehicular use, industrial activities, or storage of erodible or leachable materials that receive direct rainfall or run-on or blow-in of rainfall. Metal roofs are considered to be PGIS unless coated with an inert, non-leachable material. Roofs that are subject to venting of indoor pollutants from manufacturing, commercial or other operations or processes are also considered PGIS. A surface, whether paved or not, shall be considered PGIS if it is regularly used by motor vehicles. The following are considered regularly-used surfaces: roads, unvegetated road shoulders, bike lanes within the traveled lane of a roadway, driveways, parking lots, unfenced fire lanes, vehicular equipment storage yards, and airport runways.

**Process Wastewater** means any water which, during manufacture or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by product, or waste product.

**Qualified Personnel or Consultant** means someone who has had professional training in the aspects of Stormwater management for which they are responsible and are under the functional control of the Permittee.

**RCW** means the Revised Code of Washington State.

**Regulated Small Municipal Separate Storm Sewer System (MS4)** means a Municipal Separate Storm Sewer System which is automatically designated for inclusion in the Phase II Stormwater permitting program by its location within an Urbanized Area, or by designation by the NPDES permitting authority and is not eligible for a waiver or exemption under S1.C.

**Replaced impervious surfaces** means, for structures, the removal and replacement of any exterior impervious surfaces or foundation; or, for other impervious surfaces, the removal down to bare soil, or base course, and replacement. Exemptions and partial exemptions are defined in Appendix 1 of this Permit.

**Runoff** is water that travels across the land surface and discharges to water bodies either directly or through a collection and conveyance system. See also “Stormwater.”

**Shared Waterbodies** means waterbodies, including downstream segments, lakes and estuaries that receive discharges from more than one permittee.

**Secondary Permittee** is an operator of regulated small municipal separate storm sewer system which is not a city, town or county. Secondary Permittees include special purpose districts and other MS4s that meet the criteria for a regulated small MS4 in S1.B.

**Significant contributor** means a discharge contributes a loading of pollutants considered to be sufficient to cause or exacerbate the deterioration of receiving water quality or instream habitat conditions.

**Sediment/Erosion-Sensitive Feature** means an area subject to significant degradation due to the effect of construction runoff or areas requiring special protection to prevent erosion. See Appendix 6 Determining Construction Site Sediment Transport Potential for a more detailed definition.

**Small Municipal Separate Storm Sewer System** or **Small MS4** is a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels and/or storm drains which is:

- a. Owned or operated by a city, town, county, district, association or other public body created pursuant to State law having jurisdiction over disposal of sewage, industrial wastes, Stormwater, or other wastes, including special districts under State law such as a sewer districts, flood control districts or drainage districts, or similar entity.
- b. Designed or used for collecting or conveying Stormwater.
- c. Not a combined sewer system,
- d. Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
- e. Not defined as “large” or “medium” pursuant to 40 CFR 122.26(b)(4) & (7) or designated under 40 CFR 122.26 (a)(1)(v).

Small MS4s include systems similar to separate storm sewer systems in municipalities such as: universities, large publicly owned hospitals, prison complexes, highways and other thoroughfares. Storm sewer systems in very discrete areas such as individual buildings do not require coverage under this Permit.

Small MS4s do *not* include storm drain systems operated by non-governmental entities such as: individual buildings, private schools, private colleges, private universities, and industrial and commercial entities.

**Stormwater** means runoff during and following precipitation and snowmelt events, including surface runoff and drainage.

**Stormwater Associated with Industrial and Construction Activity** means the discharge from any conveyance which is used for collecting and conveying Stormwater, which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant, or associated with clearing grading and/or excavation, and is required to have an NPDES permit in accordance with 40 CFR 122.26.

**Stormwater Management Manual for Western Washington** means the 5-volume technical manual (Publication Nos. 99-11 through 15 for the 2001 version and Publication Nos. 05-10-029-033 for the 2005 version (The 2005 version replaces the 2001 version) prepared by Ecology for use by local governments that contains BMPs to prevent, control, or treat pollution in storm water.

**Stormwater Management Program** (SWMP) means a set of actions and activities designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable and to protect water quality, and comprising the components listed in S5 or S6 of this Permit and any additional actions necessary to meet the requirements of applicable

**Total Maximum Daily Load** (TMDL) means a water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant’s sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation must

also account for seasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. The Clean Water Act, section 303, establishes the water quality standards and TMDL programs.

**Urbanized Area (UA)** is a land area comprising one or more places and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile. For the year 2000 Census, the U.S. Census Bureau classified "urban" as all territory, population, and housing units located within an Urbanized Area (UA) or an Urban Cluster (UC). It delineated UA and UC boundaries to encompass densely settled territory, which consists of: core census block groups or blocks that have a population density of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile. In addition, under certain conditions, less densely settled territory may be part of each UA or UC. The U.S. Census Bureau announced the "Census 2000 Urbanized Areas" on May 1, 2002. More information can be found at the U.S. Census Bureau website.

**Urban/higher density rural subbasins** means any subbasin or portion thereof that is within or proposed to be within the urban growth area (UGA), or any rural area subbasin or portion thereof fifty percent or more of which is comprised of lots smaller than 5 acres in size.

**Vehicle Maintenance or Storage Facility** means an uncovered area where any vehicles are regularly washed or maintained, or where at least 10 vehicles are stored.

**Waters of the State** includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the state" as defined in Chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and water courses within the jurisdiction of the State of Washington.

**Water Quality Standards** means Surface Water Quality Standards, Chapter 173-201A WAC, Ground Water Quality Standards, Chapter 173-200 WAC, and Sediment Management Standards, Chapter 173-204 WAC.



**Appendix E**

**Stormwater Management Program (SWMP)  
2011 Annual Report**

**Signature Page**

**PREPARED BY:**



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Rick McBroom  
Engineering Tech III

3-22-12

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Date

**REVIEWED BY:**



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Doug Christenson, P.E.  
Water Resources Engineer

3-22-12

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Date

**REVIEWED BY:**



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Peter Brooks, P.E.  
Water Resources Manager

3-29-12

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Date

**APPROVED BY:**



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Scott Egger, P.E.  
Director of Public Works

3-29-12

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Date

## **Appendix F**

### **NPDES Phase II Annual Report Form for Cities, Towns and Counties (Appendix 3 of the Permit) for Permit Year 2011**

<b>I. Permittee Information</b>	
<b>Permittee Name</b> City of Lacey	<b>Permittee Coverage Number</b> WAR04-5011
<b>Contact Name</b> Doug Christenson	<b>Phone Number</b> 360-438-2686
<b>Mailing Address</b> 420 College St SE	
<b>City</b> Lacey	<b>State</b> <b>Zip + 4</b> 98503
<b>Email Address</b> dchriste@ci.lacey.wa.us	

<b>II. Regulated Small MS4 Location</b>										
<b>Jurisdiction</b> City of Lacey	<table border="1"> <tr> <th colspan="3"><i>Entity Type: Check the box that applies</i></th> </tr> <tr> <th>County</th> <th>City/Town</th> <th>Other</th> </tr> <tr> <td></td> <td style="text-align: center;">X</td> <td></td> </tr> </table>	<i>Entity Type: Check the box that applies</i>			County	City/Town	Other		X	
<i>Entity Type: Check the box that applies</i>										
County	City/Town	Other								
	X									
<b>Major Receiving Water(s)</b> Woodland Creek, Puget Sound										

<b>III. Relying on another Governmental Entity</b>	
<p>If you are relying on another governmental entity to satisfy one or more of the permit obligations, list the entity and briefly describe the permit obligation(s) they are implementing on your behalf below. <i>Attach a copy of your agreement with the other entity to provide additional detail.</i></p>	
<b>Name of Entity:</b>	<b>Permit Obligation(s):</b>

## IV. Certification

**All annual reports must be signed and certified by the responsible official(s) of permittee or co-permittees.** Please print and sign this page of the reporting form and mail it (with an original signature) to Ecology at the address noted below. An electronic signature will not suffice.

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that Qualified Personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations.

Name <u>Scott Gys</u>	Title <u>D.P.W.</u>	Date <u>3-29-12</u>
Name _____	Title _____	Date _____
Name _____	Title _____	Date _____
Name _____	Title _____	Date _____
Name _____	Title _____	Date _____

PLEASE indicate reporting year and your jurisdiction in Line 1, above.

PLEASE refer to the INSTRUCTIONS tab for assistance filling out this table.

NOTE: For clarification on how to answer questions, place cursor over cells with red flags.

NOTE: Please answer all questions.

PLEASE review your work for completeness and accuracy. Save this worksheet as you go!

Question		Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
1.	<b>Attached</b> annual written update of Permittee's Stormwater Management Program (SWMP), including applicable requirements under S5.A.2 and S9?	Y		Attached	City of Lacey 2011 SWMP
2.	<b>Attached</b> a copy of any annexations, incorporations or boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period, and implications for the SWMP as per S9.E.3?	N/A		The City of Lacey acquired 407 acres in March 2011, however it is located outside the City limits. Thurston County's NPDES permit would apply to this site.	
3.	Implemented an ongoing program for gathering, tracking, maintaining, and using information to evaluate SWMP development, implementation and permit compliance and to set priorities? (S5.A.3)	Y		Currently tracking activities and developing evaluation methods. We will need to further refine process in the coming years.	
4.	Began tracking costs or estimated costs of the development and implementation of the SWMP? ( <i>Required</i> no later than January 1, 2009, S5.A.3.a)	Y		Currently tracking cost	

Question		Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
5.	SWMP includes an education program aimed at residents, businesses, industries, elected officials, policy makers, planning staff and other employees of the Permittee? ( <i>Required to begin</i> by February 15, 2009, S5.C.1)	Y		The City has provided these educational activities to the targeted audiences and plans to expand programs in the future.	
6.	Distributed appropriate information to target audiences identified in the area served by the MS4? ( <i>Required to begin</i> by February 15, 2009, S5.C.1.a)	Y		Information is distributed to the Target audiences to the maximum extent practicable. Mobile Businesses and Carpet cleaning are challenging targets to reach effectively. Research will need to be done for these two areas in order to improve our program.	
7.	Tracked the types of public education and outreach activities implemented. ( <i>Required to begin</i> by February 15, 2009, S5.C.1.c)	Y		Currently tracking activities	SWMP pages 13-16
7b.	Number of activities implemented:		40		
8.	Measured the understanding and adoption of the targeted behaviors among at least one targeted audience in at least one subject area. ( <i>Required to begin</i> by February 15, 2009, S5.C.1.b)	Y		Please see Section 2.3 of the SWMP.	SWMP page 11
9.	Provided opportunities for the public to participate in the decision making processes involving the development, implementation and updates of the Permittee's SWMP? ( <i>Required</i> by February 15, 2008, S5.C.2.a)	Y		The City has provided opportunities, however there has not been much participation. We will continue to research alternative outreach efforts to promote more involvement.	
10.	Developed and implemented a process for public involvement and consideration of public comments on the SWMP? ( <i>Required</i> by February 15, 2008, S5.C.2.a)	Y		Our current programs provide information on how to get involved with regards to program development and a process is in place to consider comments.	

Question		Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
11.	Made the most current version of the SWMP available to the public. (S5.C.2.b)	Y		Available upon request.	
12.	Posted the SWMP and latest annual report on your website. (S5.C.2.b)	Y		Currently on our website.	
12b.	NOTE website address in <i>Attachment</i> field:	Y			<a href="http://www.ci.lacey.wa.us/publicworks-library">www.ci.lacey.wa.us/publicworks-library</a>
13.	Initiated or implemented an ongoing program to detect and remove illicit connections and illegal discharges into the Permittee's MS4? ( <i>Required</i> August 19, 2011, S5.C.3)	Y		Lacey currently has an IDDE program that includes an illicit connection component.	
14.	Developed and currently maintain a map of your MS4? ( <i>Required</i> by February 16, 2011, S5.C.3.a)	Y		We currently maintain a map of our MS4.	
14b.	Initiated a program to develop and maintain a map of all connections to the MS4 authorized or allowed by the Permittee after the Permit effective date? (S5.C.3.a.ii)	Y		Once the storm system has been as-built our mapping staff input this information into our mapping program.	
15.	Map shows the location of all known municipal separate storm sewer outfalls, receiving waters and structural stormwater BMPs owned, operated, or maintained by the Permittee? ( <i>Required</i> by February 16, 2011, S5.C.3.a.i)	Y		All known locations are currently mapped.	
16.	Map shows all storm sewer outfalls with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems and includes tributary conveyances, associated drainage areas and land use? ( <i>Required</i> by February 16, 2011, S5.C.3.a.i)	Y		All known Outfalls are currently mapped. Program improvements may need refinement.	

Question		Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
17.	Map shows geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters? ( <i>Required</i> by February 16, 2011, S5.C.3.a.iii)	Y		We currently have a map providing this information.	
18.	Map has been made available upon request? (S5.C.3.a.iv)	Y		Maps available upon request	
19.	Developed and implemented regulatory actions necessary to effectively prohibit non-stormwater, illicit discharges into the Permittee's MS4? ( <i>Required</i> by August 15, 2009, S5.C.3.b)	Y		Existing regulations were amended to fully comply with Permit. Lacey Ordinance #1332 was adopted on August 13, 2009, amending the Public Works Development Guidelines.	
20.	Developed and implemented an ongoing program to detect and address non-stormwater illicit discharges, including spills, and illicit connections into the Permittee's MS4? ( <i>Required</i> by August 19, 2011, S5.C.3.c)	Y		Lacey currently has an IDDE program.	
21.	Developed procedures for locating priority areas likely to have illicit discharges, including at a minimum: evaluating land uses and associated business/industrial activities present; areas where complaints have been registered in the past; and areas with storage of large quantities of materials that could result in illicit discharges, including spills? ( <i>Required</i> by August 19, 2011, S5.C.3.c.i)	Y		Procedures are in place to address illicit discharges as the City becomes aware of the potential threats. This program will also continue evaluate threats and modify as necessary.	



Question	Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
22.	Implemented field assessment activities, including visual inspection of priority outfalls identified during dry weather, and for the purposes of verifying outfall locations, identifying previously unknown outfalls, and detecting illicit discharges. <i>(Required by August 19, 2011, S5.C.3.c.ii)</i>	Y	Field assessments were initiated in 2010 and will continue to be expanded in the future.	
23.	Prioritized receiving waters for visual inspection? <i>(Required by February 16, 2010, S5.C.3.c.ii)</i>	Y	Receiving waters have been Prioritized	
24.	Conducted field assessments for three high priority water bodies? <i>(Required by February 16, 2011, S5.C.3.c.ii)</i>	Y	Field assessments were initiated in 2010 on Long Lake, Hicks Lake and along portions of Woodland Creek and will continue to be expanded in the future.	
25.	Conducted field assessments on at least one high priority water body? <i>(Required annually after February 16, 2011, S5.C.3.c.ii)</i>	Y	In 2011 Field assessment were conducted on the shoreline of Chambers Lake that fall within the City Limits.	
26.	Developed and implemented procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the Permittee? <i>(Required by August 19, 2011, S5.C.3.c.iii)</i>	Y	Procedures are in place to address public and environmental threats associated with Illicit Discharges.	
27.	Developed and implemented procedures for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, collecting and analyzing water samples, and/or other detailed inspection procedures? <i>(Required by August 19, 2011, S5.C.3.c.iv)</i>	Y	IDDE program is in place to address tracing needs.	

Question		Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
28.	Developed and implemented procedures for removing the source of the discharge, including notification of appropriate authorities; notification of the property owner; technical assistance for eliminating the discharge; follow-up inspections; and escalating enforcement and legal actions if the discharge is not eliminated? ( <i>Required</i> by August 19, 2011, S5.C.3.c.v.)	Y		procedures are covered in the City's IDDE program and addressed in Ord. 1332	
29.	Informed public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste? ( <i>Required</i> by August 19, 2011, S5.C.3.d)	Y		Information is provided to the target audiences.	
30.	Distributed appropriate information to target audiences identified pursuant to S5.C.1? ( <i>Required</i> by August 19, 2011, S5.C.3.d.i)	Y		Assuming the question is referring to S5.C.3.d (Permittees shall inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.)	
31.	Publicized a hotline or other local telephone number for public reporting of spills and other illicit discharges? ( <i>Required</i> by February 15, 2009, S5.C.3.d.ii)	Y		Hotline is publicized in many different newsletter, presentations and on our website at <a href="http://www.ci.lacey.wa.us/report-a-spill">www.ci.lacey.wa.us/report-a-spill</a> .	
31b.	Number of hotline calls received:		137		
31c.	Number of follow-up actions taken in response to calls:		137		
32	Maintained a hotline or other reporting number for public reporting of illicit discharges, including spills? ( <i>Required</i> by February 15, 2009, S5.C.3.d.ii)	Y		A 24 hour phone number is available.	
32b.	NOTE hotline number in <i>Comments</i> field	y		360-491-5644	
33	Tracked the number of illicit discharges, including spills, identified? ( <i>Required</i> by August 19, 2011, S5.C.3.e)	Y		All Illicit discharges are tracked	

Question		Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
33b.	Number of illicit discharges identified:		137		
34	Tracked the number of inspections made for illicit connections? ( <i>Required</i> by August 19, 2011, S5.C.3.e)	Y			
34b.	Number of inspections:		0		
35	Received feedback from IDDE public education efforts? ( <i>Required</i> by August 19, 2011, S5.C.3.e)	N		No Feedback was Received	
36	<b>Attached</b> report on IDDE public education efforts? ( <i>Required</i> by August 19, 2011, S5.C.3.d, S5.C.3.e)	NA		No Report Required, Please see Education and Outreach.	SWMP pages 13-16
37	Municipal field staff responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, improper disposal and illicit connections are trained to conduct these activities? ( <i>Required</i> by August 15, 2009, S5.C.3.f.i)	Y		Two awareness level and one operations level Hazardous Materials training classes were provided in 2011	
37b.	Number of trainings provided:		2		
37c.	Number of staff trained:		42		
38	Provided follow-up training as needed to address changes in procedures, techniques or requirements? ( <i>Required</i> by August 15, 2009, S5.C.3.f.i)	NA		No follow-up training needed in 2011	
38b.	Number of trainings provided:		0		
38c.	Number of staff trained:		0		

Question	Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
39	Developed and implemented an ongoing training program on the identification of an illicit discharge/connection, and on the proper procedures for reporting and responding to the illicit discharge/ connection for all municipal field staff, which, as part of their normal job responsibilities, might come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system? <i>(Required by February 16, 2010, S5.C.3.f.ii.)</i>	Y	Illicit Discharge training was provided in 2011	
39b.	Number of trainings provided:	2		
39c.	Number of staff trained:	42		
40	Developed, implemented and enforced a program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities? <i>(Required by February 16, 2010, S5.C.4)</i>	Y	addressed in the City of Lacey 2010 Stormwater Design Manual	
41	Applied stormwater runoff program to all sites that disturb a land area 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale? <i>(Required by February 16, 2010, S5.C.4)</i>	Y	addressed in the City of Lacey 2010 Stormwater Design Manual	
42	Applied stormwater runoff program to private and public development, including roads? <i>(Required by February 16, 2010, S5.C.4)</i>	Y	addressed in the City of Lacey 2010 Stormwater Design Manual	

Question		Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
43	Applied the Technical Thresholds in Appendix 1 to all sites 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale? <i>(Required by February 16, 2010, S5.C.4)</i>	Y		addressed in the City of Lacey 2010 Stormwater Design Manual	
44	Adopted and implemented regulatory mechanism (such as an ordinance) necessary to address run-off from new development, redevelopment and construction site activities? <i>(Required by February 16, 2010, S5.C.4.a)</i>	Y		Ordinance no.1342 adopted the City of Lacey 2010 Stormwater Design Manual and amended section 14.24.160 of the Lacey Municipal Code on January 28, 2010	
45	Retained existing local requirements to apply stormwater controls at smaller sites or at lower thresholds than required pursuant to S5.C.4? <i>(S5.A.4)</i>	Y		addressed in the City of Lacey 2010 Stormwater Design Manual	
46	The ordinance or other enforceable mechanism includes the minimum requirements, technical thresholds, and definitions in Appendix 1 (or an equivalent approved by Ecology under the NPDES Phase I Municipal Stormwater Permit) for new development, redevelopment, and construction sites? <i>(Required by February 16, 2010, S5.C.4.a.i)</i>	Y		addressed in the City of Lacey 2010 Stormwater Design Manual	
47	The ordinance or other enforceable mechanism includes exceptions and variance criteria equivalent to those in Appendix 1? <i>(Required by February 16, 2010, S5.C.4.a.i., and Section 6 of Appendix 1)</i>	Y		addressed in the City of Lacey 2010 Stormwater Design Manual and the 2009 Development Guidelines and Public Works Standards	

Question		Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
48	Were exceptions or variances to the minimum requirements in Appendix 1 granted? (Required by February 16, 2010, S5.C.4.a.i., and Section 6 of Appendix 1)	N		No exceptions or variances were granted.	
48b.	If so, how many were granted?		0		
49	The ordinance or other enforceable mechanism includes a site planning process and BMP selection and design criteria that, when used to implement the minimum requirements in Appendix 1 (or equivalent approved by Ecology under the Phase I Permit) will protect water quality, reduce the discharge of pollutants to the maximum extent practicable and satisfy the State requirement under Chapter 90.48 RCW to apply all known, available and reasonable methods of prevention, control and treatment (AKART) prior to discharge? (Required by February 16, 2010, S5.C.4.a.ii)	Y		addressed in the City of Lacey 2010 Stormwater Design Manual	
49b.	Cite documentation to meet this requirement in Attachment field:	Y			The City of Lacey 2010 Stormwater Design Manual
50	The ordinance or other enforceable mechanism provides the legal authority, through the approval process for new development, to inspect private stormwater facilities that discharge to the Permittee's MS4? (Required by February 16, 2010, S5.C.4.a.iii)	Y		addressed in the City of Lacey 2010 Stormwater Design Manual and the 2009 Development Guidelines and Public Works Standards as well as Ordinance 1332.	

Question	Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
51	The ordinance or other enforceable mechanism allows non-structural preventive actions and source reduction approaches such as Low Impact Development (LID) Techniques to minimize the creation of impervious surfaces and minimize the disturbance of native soils and vegetation? ( <i>Required</i> by February 16, 2010, S5.C.4.a.iv)	Y	addressed in the City of Lacey 2010 Stormwater Design Manual	
52	If the ordinance or regulatory mechanism allows construction sites to apply the <b>Erosivity Waiver</b> in Appendix 1, Minimum Requirement #2, does it include appropriate, escalating enforcement sanctions for construction sites that provide notice to the Permittee of their intention to apply the waiver but do not meet the requirements (including timeframe restrictions, limits on activities that result in non-stormwater discharges, and implementation of appropriate BMPs to prevent violations of water quality standards) to qualify for the waiver? (If waiver is allowed, the qualification is <i>required</i> by February 16, 2010, S5.C.4.a.v)	N/A	Erosivity waiver is not allowed per the City of Lacey 2010 Stormwater Design Manual	

Question		Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
53	Developed and implemented a permitting process to address runoff from new development, redevelopment and construction site activities with plan review, inspection, and enforcement capability? ( <i>Required</i> by February 16, 2010, S5.C.4.b)	Y		addressed in the City of Lacey 2010 Stormwater Design Manual and the 2009 Development Guidelines and Public Works Standards	
54	Applied permitting process to all sites that disturb a land area 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale? ( <i>Required</i> by February 16, 2010, S5.C.4.b)	Y		addressed in the City of Lacey 2010 Stormwater Design Manual and the 2009 Development Guidelines and Public Works Standards	
55	Reviewed <b>Stormwater Site Plans</b> for new development and redevelopment projects? ( <i>Required</i> by February 16, 2010, S5.C.4.b.i)	Y		All Stormwater Site Plans are reviewed.	
55b.	Number of site plans reviewed during the reporting period:		11		
56	Inspected, prior to clearing and construction, all known development sites that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7 <b>Determining Construction Site Sediment Potential</b> ? ( <i>Required</i> by February 16, 2010, S5.C.4.b.ii)	Y		All high potential sites were reviewed in 2011	
56b.	Number of qualifying sites inspected prior to clearing and construction during the reporting period:		2	Carpenter Rd widening and Eagles Ct projects	



Question		Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
57	Inspected construction-phase stormwater controls at all known permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls? ( <i>Required</i> by February 16, 2010, S5.C.4.b.iii)	Y		Inspectors are on site throughout construction phase.	
57b.	Number of sites inspected during the construction phase for the reporting period:		2		
58	Enforced as necessary based on the inspection at new development and redevelopment projects? ( <i>Required</i> by February 16, 2010, S5.C.4.b.iii)	Y		No enforcement necessary in 2011	
58b.	Number of enforcement actions taken during the reporting period:		0		
59	Inspected qualifying permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater controls such as stormwater facilities and structural BMPs? ( <i>Required</i> by February 16, 2010, S5.C.4.b.iv and v)	Y		The City of Lacey continually inspects sites throughout the construction phase , we also require the design engineer to certify that the system was installed and maintained as designed.	
59b.	Number of qualifying sites known during the reporting period:		2		
59c.	Number of qualifying sites inspected during the reporting period:		2		
60	Verified a maintenance plan is completed and responsibility for maintenance is assigned for qualifying projects? ( <i>Required</i> by February 16, 2010, S5.C.4.b.iv)	Y		Addressed in the design phase of each project.	

Question		Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
61	Enforced regulations as necessary based on the inspection? ( <i>Required</i> by February 16, 2010, S5.C.4.b.iv)	Y		Inspectors are on site throughout construction phase to enforce regulations.	
61b.	Number of enforcement actions taken during the reporting period:		0		
62	Developed and implemented an enforcement strategy to respond to issues of non-compliance with the regulations for qualifying projects? ( <i>Required</i> by February 16, 2010, S5.C.4.b.vi)	Y		Enforcement strategies are in place	
63	Did the Permittee choose to allow construction sites to apply the <b>Erosivity Waiver</b> in Appendix 1, Minimum Requirement #2? (S5.C.4.b.vii)	N		No Waivers were allowed in 2011	
63b.	If yes, how many waivers were allowed ?		0		
64	Developed and implemented a long-term operation and maintenance (O&M) program for post-construction stormwater facilities and BMPs? ( <i>Required</i> by February 16, 2010, S5.C.4.c)	Y		O&M program currently in place.	
65	Adopted an ordinance or other regulatory mechanism that clearly identifies the party responsible for maintenance, requires inspection of facilities and establishes enforcement procedures? ( <i>Required</i> by February 16, 2010, S5.C.4.c.i)	Y		Ordinance 1332 addresses maintenance requirements.	
66	Inspected post-construction stormwater controls, including structural BMPs, at new development and redevelopment projects? ( <i>Required</i> by February 16, 2010, S5.C.4.c)	Y		Post construction inspections are added to our existing maintenance program once construction is complete.	

Question		Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
66b.	Number of sites inspected during the reporting period:		19		
66c.	Number of structural BMPs inspected during the reporting period:		19	Assuming each site consists of a suit of BMP's. All individual BMP's were inspected throughout all phases of the projects.	
66d.	Number of enforcement actions taken during the reporting period:		0		
67	Established maintenance standards that are as protective, or more protective, of facility function as those specified in Chapter 4 of Volume V of the <b>2005 Stormwater Management Manual for Western Washington</b> ? ( <i>Required</i> by February 16, 2010, S5.C.4.c.ii)	Y		Addressed By Ordinance 1332, adopted in 2009 and the City of Lacey 2010 Stormwater Design Manual	
68	Performed timely maintenance as per S5.C.4.c.ii? ( <i>Required</i> by February 16, 2010, S5.C.4.c.ii)	Y		All maintenance was performed in a timely manner.	
68b.	<b>Attached</b> documentation of any maintenance delays. ( <i>Required</i> by February 16, 2010, S5.C.4.c.ii)	N/A		There were no maintenance delays in 2011.	
69	Established program to annually inspect all stormwater treatment and flow control facilities (other than catch basins) permitted by the Permittee according to S5.C.4.b. unless there are maintenance records to justify a different frequency? ( <i>Required</i> by February 16, 2010, S5.C.4.c.iii)	Y		All Facilities are inspected at least annually.	
70	If using reduced inspection frequency, <b>Attached</b> documentation as per S5.C.4.c.iii? ( <i>Required</i> by February 16, 2010, S5.C.4.c.iii)	N/A		The City of Lacey is not using reduced frequency for facility inspections.	

Question		Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
71	Inspected all new stormwater treatment and flow control facilities owned or operated, including catch basins, for new residential developments that are a part of a larger common plan of development or sale, every 6 months during the period of heaviest house construction (i.e., 1 to 2 years following subdivision approval) to identify maintenance needs and enforce compliance with maintenance standards as needed? ( <i>Required</i> by February 16, 2010, S5.C.4.c.iv)	Y		Inspectors are on site during peak construction to verify compliance and maintenance needs.	
71b.	Number of facilities inspected during the reporting period:		19	Assuming each site consists of a suit of BMP's. All individual BMP's were inspected throughout all phases of the projects.	
72	Implemented a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, other enforcement records, maintenance inspections and maintenance activities? ( <i>Required</i> by February 16, 2010, S5.C.4.d)	Y		All associated Records are retained.	
73	Provided copies of the <b>Notice of Intent for Construction Activity</b> and <b>Notice of Intent for Industrial Activity</b> to representatives of proposed new development and redevelopment? (S5.C.4.e)	Y			

Question		Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
74	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 were trained to conduct these activities? ( <i>Required</i> by February 16, 2010, S5.C.4.f)	N/A		Training was provided in 2010, no training was needed in 2011	
74b.	Number of trainings provided:		0		
74c.	Number of staff trained:		0		
75	Developed and implemented an operations and maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations? ( <i>Required</i> by February 16, 2010, S5.C.5)	Y		O&M program currently in place.	
76	Adopted maintenance standards as protective, or more protective, of facility function as those specified in Chapter 4 of Volume V of the 2005 <i>Stormwater Management Manual for Western Washington</i> ? ( <i>Required</i> by February 16, 2010, S5.C.5.a)	Y		Standards in place	
77	Performed timely maintenance as per S5.C.5.a.ii? ( <i>Required</i> by February 16, 2010, S5.C.5.a.ii)	Y		All maintenance was performed in a timely manner.	
77b.	<b>Attached</b> documentation of any maintenance delays. ( <i>Required</i> by February 16, 2010, S5.C.5.a.ii)	N/A		No maintenance delays to report.	

Question		Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
78	Established a program to annually inspect and maintained all stormwater treatment and flow control facilities (other than catch basins)? (Required by February 16, 2010, S5.C.5.c.iii)	Y		Program in place	
78b.	Number of known facilities:		364		
78c.	Number of facilities inspected during the reporting period:		251		
79	If using reduced inspection frequency, <b>Attached</b> documentation as per S5.C.5.a.ii? (Required by February 16, 2010, S5.C.5.b)	N/A		No reduced frequency necessary	
80	Conducted spot checks of stormwater facilities after major storms? (Required by February 16, 2010, S5.C.5.c)	Y		Spot checks are made during and after events.	
80b.	Number of known facilities:		364		
80c.	Number of facilities inspected during the reporting period:		364		
81	Inspected municipally owned or operated catch basins at least once before the end of the Permit term? (Required to begin by February 16, 2010, S5.C.5.d)	Y		All municipally owned Catch Basins are inspected at least once every three years.	
81b.	Number of known catch basins:		4624		
81c.	Number of inspections:		2741		
81d.	Number of catch basins cleaned:		2741		

Question		Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
82	Established and implemented practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads or highways owned or maintained by the Permittee, and road maintenance activities conducted by the Permittee? <i>(Required by February 16, 2010, S5.C.5.f)</i>	Y		Practices to reduce stormwater impacts are in place.	
83	Established and implemented policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the Permittee and subject to this Permit, including but not limited to: parks, open space, road right-of-way, maintenance yards, and stormwater treatment and flow control facilities? <i>(Required by February 16, 2010, S5.C.5.g)</i>	Y		policies and procedures are in place.	
84	Implemented an operations and maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations? <i>(Required by February 16, 2010, S5.C.5.h.)</i>	Y		O&M programs, including training are currently in place.	
84b.	Number of trainings provided:		2		
84c.	Number of staff trained:		42		

Question		Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
85	Implemented a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in areas subject to this Permit that are not required to have coverage under the Industrial Stormwater General Permit? (Required by February 16, 2010, S5.C.5.i)	Y		A SWPPP is in place for the Maintenance shop and all Material Storage Facilities.	
86	Is there an approved Total Maximum Daily Load (TMDL) applicable to stormwater discharges from a MS4s owned or operated by the Permittee?	N/A		Not required during this permit cycle	
87	Complied with the specific requirements identified in Appendix 2? (S7.A)	N/A		Not required during this permit cycle	
88	<b>Attached</b> status report of TMDL implementation? (S7.A)	N/A		Not required during this permit cycle	
89	Where monitoring was required in Appendix 2, did you conduct the monitoring according to an approved Quality Assurance Project Plan? (S7.A)	N/A		Not required during this permit cycle	
90	Took appropriate action to correct or minimize discharges into or from the MS4 which may constitute a threat to human health, welfare, or the environment? (G3)	Y		Notified Ecology of all spills that entered the MS4	
90b.	<b>Attached</b> a summary of the status of implementation of any actions taken pursuant to S4.F and the status of any monitoring, assessment, or evaluation efforts conducted during the reporting period? (S4.F.3.d)	N/A		No actions needed	



Question		Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page #, if applicable
91	Notified Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance? (G20)	N/A		No notification needed.	
92	Notified Ecology immediately in cases where the Permittee becomes aware of a discharge from the Permittees MS4 which may cause or contribute to an imminent threat to human health or the environment? (G3)	N/A		There were no known instances of an illicit discharge leaving our MS4 in 2011.	
93	<b>Attached</b> a summary of identified barriers to the use of low impact development (LID) and measures to address the barriers (Required to be submitted by March 31, 2011, S9.E.4.a)	N/A		This summary was submitted with the 2010 annual report in march 2011	
94	<b>Attached</b> a report describing LID practices currently available and that can be reasonably implemented, potential or planned non-structural actions and LID techniques to prevent stormwater impacts, goals and metrics to identify, promote, measure LID; and schedules to require and implement non-structureal and LID techniques on a broader scale (Required to be submitted by March 31, 2011, S9.E.4.b)	N/A		This report was submitted with the 2010 annual report in march 2011	

## VII. Information Collection, BMP Evaluation, and Monitoring

Complete Part A for all annual reports.

NOTE: Please note in Row 1 of the table if you have no information to report.

NOTE: Please limit your entries to 255 characters per cell. You may include additional information in your Supplemental Documentation attachment and reference it below with the page number.

### A. Information Collection

<b>Briefly describe any stormwater monitoring, studies, or type of information collected and analyzed during the reporting period. (S8.B.1)</b>	<b>Who/how to contact for additional information?</b>
1. The City of Lacey's Pet Waste Management BMP evaluation was cond	Please contact Erin Keith at 360-438-2687
2.	
3.	
4.	
5.	
6.	

## VII. Information Collection, BMP Evaluation, and Monitoring

Complete Part B for all annual reports.

### B. SWMP Evaluation (S8.B & S9)

You are required to assess the appropriateness of the BMPs you have selected to implement your SWMP. This evaluation is necessary to evaluate whether the MEP standard set by the permit is protective of water quality in your receiving water bodies. This assessment may be entirely qualitative. Answer **NA** if you are not yet implementing BMPs for a component of the SWMP. (S8.B.2 and S9)

Question	Y/N/NA	Comments (50 word limit)
1. Are the BMPs selected and implemented for Public Outreach appropriate to minimize pollutants in the MS4 to the MEP?	Y	All BMPs are selected to minimize pollutants to the MEP based on the most current information.
2. Are the BMPs selected and implemented for Public Involvement appropriate to minimize pollutants in the MS4 to the MEP?	Y	All BMPs are selected to minimize pollutants to the MEP based on the most current information.
3. Are the BMPs selected and implemented for Illicit Discharge Detection and Elimination appropriate to minimize pollutants in the MS4 to the MEP?	Y	All BMPs are selected to minimize pollutants to the MEP based on the most current information.
4. Are the BMPs selected and implemented for Construction Stormwater Pollution Prevention appropriate to minimize pollutants in the MS4 to the MEP?	Y	All BMPs are selected to minimize pollutants to the MEP based on the most current information.
5. Are the BMPs selected and implemented for Post-Construction Runoff Management appropriate to minimize pollutants in the MS4 to the MEP?	Y	All BMPs are selected to minimize pollutants to the MEP based on the most current information.
6. Are the BMPs selected and implemented for Good Housekeeping for Municipal Operations appropriate to minimize pollutants in the MS4 to the MEP?	Y	All BMPs are selected to minimize pollutants to the MEP based on the most current information.

## VII. Information Collection, BMP Evaluation, and Monitoring

Complete Part C for all annual reports.

### C. Changes in BMPs or objectives (S8.B)

If any of the BMPs or objectives is being changed, list the old BMP and objective, the new BMP and objective, and a justification for the change below. (S8.B.2., and S9)

NOTE: You may choose to attach additional documentation justifying Changes in BMPs or objectives. Note such attachments in the *Justification for change* field.

Old BMP	Old Objective	New BMP	New Objective	Justification for Change
1				
2				
3				
4				
5				
6				
7				

**VII. Information Collection, BMP Evaluation, and Monitoring**

**D. Preparation for future, long-term monitoring**

Complete section D for the fourth annual report only.

Question	Y/N/NA	Comments (50 word limit)	Name of Attachment? Page Number?
1. Identified outfalls or conveyances for long-term stormwater monitoring? (S8.C.2.a)			
1b. <b>Attach</b> site maps and descriptions. (S8.C.2.a)	y		
2. Identified at least two questions for SWMP effectiveness monitoring and developed monitoring plans? (S8.C.2.b)			
2b. <b>Attach</b> the proposed questions and monitoring plans for SWMP effectiveness monitoring. (S8.C.2.a.ii)	y		
3. Monitoring plan developed for each question? (S8.C.1.b.iii)			
3b. <b>Attach</b> a copy of the monitoring plan.	y		
4. Identified sites in preparation for future, long-term monitoring? (S8.C.1.a., and S8.C.2.b)			
4b. <b>Attach</b> a summary of the status of site identification for long-term stormwater monitoring; proposed questions for SWMP effectiveness monitoring; and status of developing the SWMP effectiveness monitoring plans.	y		