

CITY OF LYNDEN

STORMWATER MANAGEMENT PROGRAM 2014 ANNUAL REPORT



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This document serves as Attachment A to the City of Lynden's 2014 Annual Report submittal to the Department of Ecology for its Phase II NPDES Municipal Stormwater Permit

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- Attachment B: Signatory Letter Designating authority to the Public Works Director
- Attachment C: Interdepartmental Coordination Report
- Attachment D: Water Quality Monitoring Report per Phase II Appendix 2
- Attachment E: Stormwater Capital Improvement Plan per Phase II Appendix 2

1.0 Introduction

The City of Lynden (City) has developed a Stormwater Management Program (SWMP) to meet the terms and conditions of its Western Washington Phase II Municipal Stormwater Permit (Permit) under the National Pollutant Discharge Elimination System (NPDES). This permit is required because the City of Lynden has been designated by the Environmental Protection Agency and the Washington State Department of Ecology as one of thousands of municipalities in the United States requiring a special stormwater permit. These permits were deemed necessary because stormwater runoff from streets, parking lots, construction sites, industrial properties, and residential areas is now recognized as one of the leading sources of pollution to our streams, lakes, wetlands, the Nooksack River and Puget Sound. In addition, the City has requirements to monitor fecal coliform levels in stormwater as part of the Nooksack River Total Maximum Daily Load (TMDL) study.

The Phase II Permit allows municipalities to discharge stormwater from municipal systems into “waters of the state” such as rivers, lakes and streams, as long as there are programs in place to reduce pollutants in stormwater to the “maximum extent practicable”. Much of the stormwater runoff from the City of Lynden’s municipal separate storm sewer system (MS4) discharges into Fishtrap Creek, a tributary to the Nooksack River running through the middle of the City. Smaller volumes of stormwater also go to Kamm Creek and Duffner Creek (other Nooksack Tributaries), and some stormwater goes directly to the Nooksack River. Eventually all of the stormwater from the Lynden MS4 goes into the Nooksack River. Regulating stormwater quality is a designated component of the City’s Comprehensive Plan. Requirements under the NPDES Phase II Permit provide the City opportunities to accomplish cleaning up these waterways.

The Permit issued by the Department of Ecology (Ecology) became effective August, 1 2013, and goes through July 31, 2018. The City is required to file an annual report by March 31st each year of the Permit term. The annual report details the permit compliance accomplishments carried out during the previous calendar year and activities planned for the coming year. This SWMP document serves as Attachment A to the City of Lynden’s Annual Report submittal to Ecology.

1.1 City Organizational Responsibilities

The City of Lynden’s Public Works Department holds the primary responsibility for developing the stormwater program and tracking Phase II Permit requirements. Within the Public Works Department, program administration is carried out by the Public Works Director, Program Manager, and administrative staff. Inspection, testing and tracking duties are carried out by the administrative staff and the Public Works Systems and Operations crews. The Planning Department, Parks Department, Fire Department, and Police Department also hold integral roles in implementing the components of the stormwater program.

1.2 Document Organization

This document is organized by program components in the order found in Condition S5C of the Phase II Permit. To facilitate cross-reference with the permit language, each permit item is presented along with the associated permit section indicator in parentheses as follows:

- ✓ Section 2.0 addresses the Stormwater Management Program Development (S5.A & S5.B)
- ✓ Section 3.0 addresses the Public Education and Outreach Component (S5.C.1)
- ✓ Section 4.0 addresses the Public Involvement and Participation Component (S5.C.2)
- ✓ Section 5.0 addresses Illicit Discharge Detection and Elimination (S5.C.3)

- ✓ Section 6.0 addresses Controlling Runoff from New Development, Redevelopment and Construction Sites (S5.C.4)
- ✓ Section 7.0 addresses Pollution Prevention and Operation and Maintenance for Municipal Operations (S5.C.5)
- ✓ Section 8.0 addresses Monitoring (S8)

2.0 Stormwater Management Program Development (S5.A and S5.B)

2.1 Permit Requirements

Sections S5.A and S5.B of the Permit require the City to:

- Develop and implement a Stormwater Management Program and submit annual compliance reports
- Manage an ongoing program for gathering, tracking, maintaining and using information to evaluate the SWMP development, implementation and permit compliance and set priorities
- Track the cost of the development and implementation of the SWMP
- Track the number of inspections, official enforcement actions and types of public education
- Coordinate with other NPDES permittees and partners in the region on stormwater related policies, programs, and projects
- Coordinate internally among City Departments and document the efforts

2.2 Accomplishments in 2014

The City of Lynden has been developing and implementing a Stormwater Management Program to reduce the discharge of pollutants from the municipal stormwater system to the maximum extent practicable in order to protect water quality. Sections 3.0 through 8.0 summarize the efforts the City has initiated and provide additional detail on the protocol that the City is building.

2.3 Plans for Program Activities in 2015

The City plans to continue to build its stormwater program with a focus on education and outreach, public involvement, partnering, and code revisions to cover illicit discharges.

3.0 Public Education and Outreach (S5.C.1)

3.1 Permit Requirements

Section S5.C.1 of the Permit requires the City to address the following public education and outreach elements:

- Develop an education program that targets specific audiences including the general public (including school age children), businesses, homeowners, landscapers, property managers, engineers, contractors, developers, review staff and land use planners, and other City employees
- Create stewardship opportunities
- Develop a program that aims to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts
- Measure improvements in the target audience's understanding of the problem and what they can do to solve it. Use this information to improve the education program
- Track and maintain records of public education and outreach activities

3.2 Accomplishments in 2014

The City of Lynden coordinated internally on efforts to educate the staff and public on stormwater management issues through the development of a stormwater committee that meets quarterly; see Attachment C for details. In 2014, the City used billing inserts to introduce the stormwater program to the public and highlighted the new stormwater website page. In addition, the City has set up the stepping stones for partnering with other entities, to include working in collaboration with:

- Whatcom Conservation District (WCD) to carry out stewardship and outreach efforts
- A Rocha and the Lynden Christian Schools to coordinate and encourage volunteers in stewardship programs
- Whatcom County Health Department to assist in local source control visits to businesses to identify pollution sources and good housekeeping practices to prevent them from entering the storm drain system
- Whatcom County Public Works Department to coordinate educational workshops and work with County stormwater that enters the City's MS4

A Stormwater Facility Maintenance workshop, coordinated by ReSources and the County Public Works Department was offered on Saturday, October 18, 2014 and announced to Public Works crews. The event was held at the Birch Bay Bible Community Church and included a field tour of their detention pond facility.



Links to stormwater educational brochures and Fact Sheets were posted on the City website along with links to other stormwater educational resources.

Since 2007, the City has visited restaurants and other food preparatory establishments in Lynden twice a year to educate them on proper fat, oil, and grease (FOG) disposal and inspect their grease traps. In 2014, 38 sites were inspected. Table 1 summarizes the education and outreach efforts undertaken by the City.

3.3 Plans for Program Activities in 2015

- The storm drain labeling effort will be revisited
- A minimum of 1 educational brochures/tip sheet will be published
- Informational packets highlighting stormwater and water quality education will be developed and distributed to local schools/ or mailed to residents and businesses
- Continue FOG visits to restaurants and other food prep facilities (churches, schools)
- Staff will continue to provide presentations on stormwater education during committee and council meetings
- Tours of the wastewater treatment plant will continue
- Media coverage of council meetings will continue to occur and articles will document stormwater efforts
- All activities will be tracked

Table 1: Education and Outreach Activities Undertaken In 2014

Educational Activity	Description of Activity	Target Audience
<i>City of Lynden</i>		
City Website	The City added a website page to introduce the stormwater program to the public. Links to educational factsheets were included as well as other sources of information	General Public, Businesses
Public Notices	The City provided Lynden Tribune with public notices regarding the new stormwater permit	General Public, Businesses
Wastewater/Stormwater Educational Tours	Three tours were conducted of the wastewater treatment plant and composting system for schools reaching approximately 200 students	School Children
Storm Water Facility Maintenance Workshop	A stormwater facility maintenance workshop was conducted by ReSources and Whatcom County	Homeowner's Association, Businesses, City Staff
Local Source Control	County Health visited 6 establishments in Lynden. The City conducted FOG visits to 38 establishments twice in 2014	Businesses, churches, schools

4.0 Public Involvement and Participation (S5.C.2)

4.1 Permit Requirements

Section S5.C.2 of the Permit requires the City to address the following public involvement and participation elements:

- Provide ongoing opportunities for public involvement in the SWMP process through committees/commissions and updating the SWMP
- Make the SWMP and Annual Compliance Report available to the public, including posting on the City's website

4.2 Accomplishments in 2014

The City of Lynden provided opportunities for public involvement and participation in 2014 through City Council and Public Works Committee meetings. Status reports on the stormwater management program were presented at monthly Public Works Committee meetings. These meetings are open to the public and are always listed on the website. In addition, the current website calls for comment and questions on stormwater management and will solicit involvement on the SWMP once this annual report is posted. Public involvement opportunities are summarized in Table 2.

Table 2: Public Involvement Opportunities Undertaken in 2014

Public Involvement Opportunity	Description
City Council Meetings	City Council holds meetings twice a month. These are open to the public
Public Works Committee Meetings	Public Works Department holds monthly committee meetings that are open to the public
Website posting of new stormwater information	City stormwater website page introduces the new program to the public and provides links to other resources and solicits comment on and questions regarding stormwater management

4.3 Planned Activities for 2015

The City plans to offer public involvement opportunities on many fronts in 2015. Discussions are underway with potential partners to establish volunteer coordinators and develop stewardship opportunities. The City will pursue grants in partnership with other entities to support new public involvement programs.

5.0 Illicit Discharge Detection and Elimination (S5.C.3)

5.1 Permit Requirements

Section S5.C.3 of the Permit requires the City to address the following illicit discharge detection and elimination (IDDE) elements:

- Develop an ongoing program to detect and remove illicit discharges, connections, and improper disposal, including any spills into the municipal separate storm sewers owned or operated by the City
- Develop a map of the municipal storm sewer system
- Implement an ordinance that prohibits illicit discharges, and create a program to detect and address illicit discharges
- Publicize a hotline or other local telephone number for public reporting of spills and other illicit discharges
- Train staff on proper IDDE and spill response procedures
- Track all spills, illicit discharges and connections reported to the City and response actions taken, including enforcement actions

5.2 Accomplishments in 2014

The City has begun to take steps to identify and eliminate illicit discharges. The City has a comprehensive map of its Municipal Separate Storm Sewer System (MS4). The map contains all known municipal storm sewer outfalls and receiving waters, and structural stormwater BMP's owned or operated by the City. The City retains development records, and updates the map on an annual basis to show all connections. The map is kept current in GIS. Copies of the map are available to the public.

The City of Lynden is working with the Whatcom County Health Department for source control and pollution prevention education. The County received an Ecology Grant for this work. Through the local source control program, the County Health Specialist has inspected 6 business establishments in Lynden: 3 gas station/ convenience stores, 1 tire center, 1 automotive center, and 1 restaurant. Educational materials were distributed to the businesses and the County sent follow-up letters itemizing specific recommendations for pollution prevention.

Water quality, illicit discharge hotline numbers are posted on the City's website:

- **(360) 354-3446** during work hours (8 am to 5 pm)
- **(360) 815-5755** outside of normal working hours

The Public Works Department is ready to record all calls regarding illicit discharges or illegal spills that are received on the hotline. In 2014, the department received two calls. The Fire Department also responded to 2 calls. These were primarily fuel spills. All circumstances were dealt with fully and resolved and contained prior to entering the MS4.

The illicit discharges reported to the water quality hotline and those identified by the staff are typically associated with less toxic discharges such as small fuel spills or wash-down water and can be handled by public works staff. Most of these are not continuous and can be addressed directly with the discharger. The City is in the process of developing a spill response plan that will be housed at the public works administrative department, street department shop, parks department shop, and at the wastewater treatment plant. This plan offers detailed instructions to first responders with steps for containment, if safe. Emergency contacts and reporting requirements are explicitly discussed. A spill report form is used to document an event. All crew vehicles will have a mobile spill kit for containment and cleanup of small spills. The street and parks crews will receive training on the spill response plan and safety meetings will address any additional questions or concerns that arise.

Medium and large spills require the fire department and/or police department to be notified. These departments have emergency response protocols that include procedures for characterizing the nature of and potential threat to the public from illicit discharges. Because the City is not equipped to respond to all hazardous spills, the City relies on Whatcom County Department of Emergency Management (WDEM), Ecology and other agencies to assist in coordinating response.

5.3 Planned Activities for 2015

The City plans to complete the spill response plan, train crews, purchase spill kits for the shops, and develop code revisions on illicit connections and discharges to support the future efforts in detection and enforcement. The current GIS mapping of the City's Municipal Separate Storm Sewer System (MS4) will be incorporated into a comprehensive Asset Management System (Cartegraph OMS) which will allow better access by City staff to MS4 mapping and allow recording and tracking of actions taken to eliminate illicit discharges.

6.0 Controlling Runoff from New Development, Redevelopment and Construction Sites (S5.C.4)

6.1 Permit Requirements

Section S5.C.4 of the Permit requires the City to address the following elements regarding controlling runoff for new development, redevelopment and construction sites:

- Develop, implement, and enforce a program to reduce pollutants in stormwater runoff discharging to the municipal separate storm sewer system from new development, redevelopment, and construction site activities
- Adopt an ordinance to address runoff from new development, redevelopment, and construction activities from both public and private sites using Appendix 1 as the standard including Low Impact Development related code
- Retain existing local requirements to apply stormwater controls at smaller sites or at lower thresholds than required pursuant to S5.C.4
- Develop and implement a planning process for development that includes plan review, inspection, and enforcement capability
- Provide copies of the Notice of Intent (NOI) for construction or industrial activities to representatives of the proposed new development and redevelopment
- Provide training to staff on the new codes, standards, and standard operating procedures
- Develop a process to record and maintain all inspections and enforcement actions by staff

6.2 Accomplishments in 2014

The City is not yet required to take action under this permit element except to make available copies of Notice of Intent for construction activity (NOI) forms to those proposing new or redevelopment projects. Several components however are in place:

- City Staff instructs development applicants to comply with the Department of Ecology's Stormwater Manual requirements and specifically those Best Management Practices related to new development or redevelopment
- Public Works Department reviews stormwater site plans and maintenance plans for all new development and redevelopment projects
- The City also usually contracts with a qualified engineering firm for construction inspections on larger projects, and enforces implementation of Best Management Practices during construction, as needed
- The City Permit Center provides Notice of Intent (NOI's) for all permitted development
- The City Public Works Department (Systems Division) currently inspects public stormwater facilities

6.3 Planned Activities for 2015

The City plans to continue to review development plans, require stormwater BMPs, and update the MS4 map on GIS and the City's Asset Management System with facility information. Code revision and post-2013 site inspections for maintenance of runoff control are scheduled to begin in 2016.

7.0 Pollution Prevention and Operation and Maintenance for Municipal Operations (S5.C.5)

7.1 Permit Requirements

Section S5.C.5 of the Permit requires the City to address the following pollution prevention and operation and maintenance elements:

- Develop and implement an operations and maintenance program, with the ultimate goal of preventing or reducing pollutant runoff from municipal operations.
- Adopt maintenance standards for the municipal separate stormwater system that are at least as protective as those specified in the Ecology's 2012 Stormwater Management Manual for Western Washington
- Perform annual inspections of stormwater flow control and treatment facilities and catch basins
- Develop Standard Operating Procedures to reduce stormwater impacts associated with runoff from municipal O&M activities
- Train staff to implement new procedures
- Prepare Stormwater Pollution Prevention Plans (SWPPPs) for all heavy equipment maintenance or storage yards identified for year-round facilities or yards, and material storage facilities owned or operated by the City

7.2 Accomplishments in 2014

The City of Lynden maintains its stormwater facilities as needed and responds promptly to reported maintenance issues. The City is not yet required to take action under this permit element; however, several components are in place:

- Conducted street sweeping and gutter cleaning on a regular basis
- Began development of stormwater pollution prevention plans (SWPPPs) for the Street Department shop, the Parks Department shop and the Wastewater Treatment Plant.
- Conducted a training for maintenance and street crew staff on stormwater protocol and pollution prevention
- Inspected and cleaned catch-basins on a rotational circuit basis

Over the last 3-4 years the Public Work Crew has been cleaning the catch basins in the City's stormwater system finishing the circuit in May of 2014. In September 2014, a few of the basins on some of the major arterials were inspected again and not much debris was found.

There is no set street sweeping schedule in the City of Lynden. Streets are swept after the storm events, starting with the major arterials, beginning at one end of the city and working toward the other. In the fall, when the leaves are falling, some streets are swept every day. Other times of the year the goal is to cover the whole city once a month depending on the amount of debris on the streets. The City often sweeps the main arterials 2-3 times a month.

7.3 Planned Activities for 2015

The City plans to continue to develop good housekeeping protocol for pollution prevention and maintenance associated with municipal operations. The City will continue to monitor the catch basins on major routes and some of the secondary routes and begin the City-wide inspection circuit again. Street sweeping will also continue.

8.0 Monitoring (S8.C.1.b and S8.C.2)

The City of Lynden has 12,930 people which typically would trigger an individual stormwater monitoring program or payment into the regional stormwater management program for status and trends monitoring and effectiveness monitoring. As a first time Phase II permittee, Lynden is not required to perform or pay for stormwater monitoring under S8.C.1. Lynden is however required to carry out monitoring per Appendix 2 of the permit to meet TMDL requirements. Attachment D discusses this monitoring plan and details the results from the 2014 fecal coliform monitoring effort at a BC Avenue catchbasin.

8.1 Planned Activities for 2015

The City will continue monitoring for fecal coliform at BC Avenue as outlined in the Quality Assurance Project Plan (QAPP) and compile results of inspection records for annual reporting.