

# STORMWATER MANAGEMENT PROGRAM



2019

City of Longview



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*This document outlines the City of Longview's Stormwater Management Program  
in compliance with the provisions of  
The State of Washington Water Pollution Control Law Chapter 90.48 Revised Code of Washington  
and  
The Federal Water Pollution Control Act (The Clean Water Act)  
Title 33 United States Code, Section 1251 et seq.*

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## Abbreviations and Acronyms

BMP	Best Management Practice
CDID #1	Consolidated Diking Improvement District #1
City	City of Longview
Ecology	Washington Department of Ecology
IDDE	Illicit Discharge Detection and Elimination
K-12	Kindergarten through 12 <sup>th</sup> Grade
LMC	Longview Municipal Code
LSAC	Longview Stormwater Advisory Committee
LID	Low Impact Development
MS4	Municipal Separate Storm Sewer System
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
Permit	Western Washington Phase II NPDES Municipal Stormwater Permit
PSA	Public Service Announcement
SAM	Stormwater Action Monitoring
SIDIR	Source Identification Information Repository
SOP	Standard Operating Procedure
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan

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# STORMWATER MANAGEMENT PROGRAM

## CITY OF LONGVIEW

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## INTRODUCTION

### Background

The National Pollutant Discharge Elimination System (NPDES) is the program created under the Federal Clean Water Act to address water pollution by regulating point sources that discharge pollutants to waters of the United States. These sources are regulated by a set of permits which are administered by the Washington Department of Ecology (Ecology) in Washington State. Permitted discharges include municipal separate storm sewer systems (MS4's), which collect and convey stormwater runoff to surface waters. As an operator of a MS4, the City of Longview is required to have coverage under Ecology's NPDES municipal stormwater permit program.

The Western Washington Phase II Municipal Stormwater Permit (Permit) outlines stormwater program activities and implementation milestones that the City must follow to comply with the Clean Water Act. Each stormwater Permit holder is required to develop a Stormwater Management Program (SWMP) that outlines the required activities, implement those activities within the required timeframes of the permit term, and submit annual reports to Ecology by March 31st each year to document progress toward permit compliance. The City of Longview has been implementing a SWMP since it originally came under Permit coverage in 2007. The current Permit was issued in 2012 and is effective until July 31, 2019. The Permit will be reissued again on August 1, 2019.



Longview's Lake Sacajawea

## The City of Longview Municipal Separate Storm Sewer System

The City of Longview owns and maintains a system designed for the safe collection, conveyance and passage of stormwater runoff known as a municipal separate storm sewer system or MS4. The MS4 includes all municipal roads and streets, curbs, gutters, inlets, catch basins, storm pipes, roadside ditches, culverts, pumps and other stormwater infrastructure which is owned or operated by the City.

The City's MS4 discharges to a number of different water bodies including Lake Sacajawea, the Cutoff Slough, and the man-made flood control network of surface water conveyances managed by the Consolidated Diking Improvement District #1 (CDID #1). Most of Longview lies within CDID #1's system of flood protection levees, and the hillside areas of the City drain to CDID #1 Ditch 6 on the District's northern perimeter. As a closed watershed and managed drainage system, the City's stormwater discharges within the CDID #1 boundaries can ultimately only reach the receiving waters of either the Cowlitz or Columbia Rivers through a series of flood control pump stations.

Longview's MS4 shares a border with the portion of the City of Kelso's MS4 that lies west of the Cowlitz River and Cowlitz County's MS4 that is contiguous with Longview's city limits. The City works closely with both Kelso and the County on interconnected stormwater infrastructure and common watersheds, as well as overall implementation of several stormwater program elements and Permit-related requirements.

## Stormwater Management Program Plan

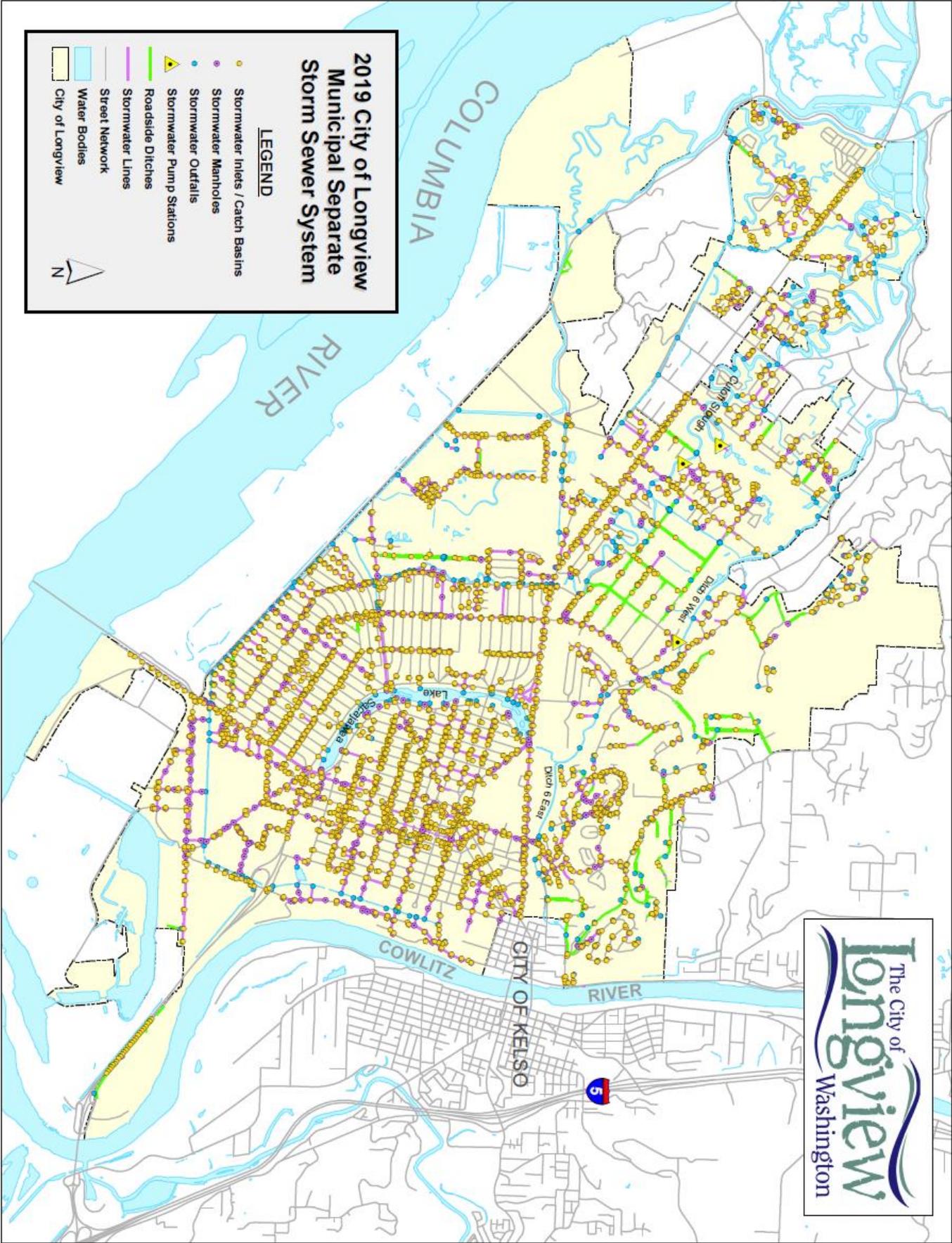
The Stormwater Management Program (SWMP) is the set of actions and activities undertaken by the City to reduce the discharge of pollutants from the MS4. The City is required to prepare written documentation of the SWMP to be made available to the public.

This document details the City's SWMP and stormwater program actions and activities—current, completed and proposed for the upcoming year—for meeting the requirements of the Permit. The SWMP is intended to inform both the regulatory needs of the Permit as well as the public on the City's stormwater program and compliance efforts.

The City's SWMP covers seven elements which coincide with the programmatic components and requirements under Sections S5, S7 and S8 of the 2012 Permit:

- Public Education and Outreach (S5.C.1)
- Public Involvement and Participation (S5.C.2)
- Illicit Discharge Detection and Elimination (S5.C.3)
- Controlling Runoff From New Development, Redevelopment & Construction (S5.C.4)
- Municipal Operations & Maintenance (S5.C.5)
- Compliance with Total Maximum Daily Load Requirements (S7)
- Monitoring & Assessment (S8)

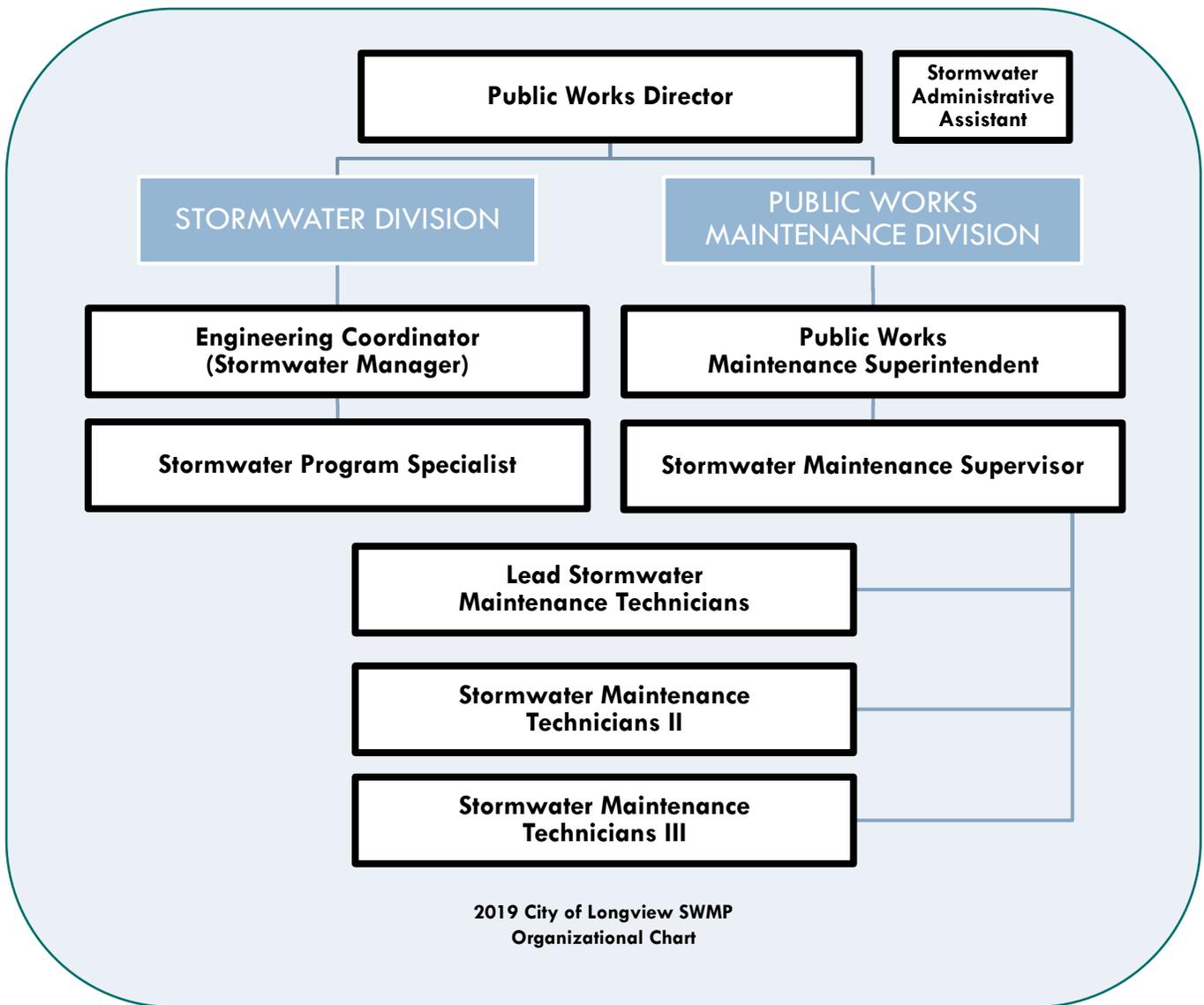
This SWMP document is revised annually and submitted to Ecology with the Permit annual report, and is available on the City's website at [www.mylongview.com](http://www.mylongview.com).



## SWMP Administration

The administration of the City of Longview’s Permit is managed by the Public Works Department. Within Public Works, the Stormwater Division is responsible for the development and implementation of the SWMP, public education and outreach, public involvement, plan review and permitting, development inspections, IDDE program activities, monitoring and City-wide coordination and training. The Street/Stormwater Maintenance Division is responsible for all stormwater-related operations and maintenance activities. Both Divisions report to and are overseen by the Public Works Director. The organization chart is shown below.

The majority of the City’s SWMP activities are funded by a stormwater utility, which is an enterprise fund based on user fees which are calculated by the amount of impervious cover on a property.



## PUBLIC EDUCATION AND OUTREACH

The City's public education and outreach program focuses on building general awareness among the public on the impacts created by stormwater runoff and the ways that everyone can be part of the solution to stormwater pollution.



### Permit Requirements

*An education and outreach program designed to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourage the public to participate in stewardship activities. The education program may be developed and implemented locally or regionally.*

#### **Minimum Performance Measures:**

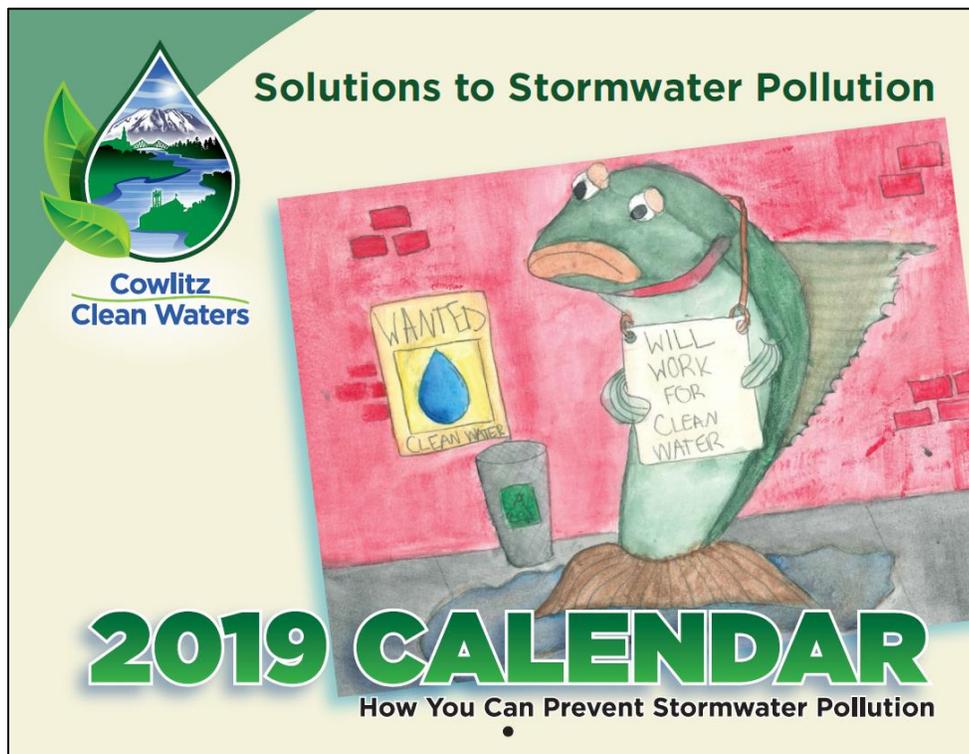
- Provide an education and outreach program for the area served by the MS4. The program shall be designed to educate target audiences about the stormwater problem and provide specific actions they can follow to minimize the problem. The program should build general awareness as well as effect behavior changes.
- Create stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities such as stream teams, storm drain marking, volunteer monitoring, riparian plantings and education activities.
- Measure the understanding and adoption of the targeted behaviors for at least one target audience in at least one subject area, and use the resulting measurements to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors.

## Completed and Current Activities

The City of Longview has developed a comprehensive public education and outreach program with strategies designed to inform the general public as well as educate targeted behaviors and audiences:

- ☑ **Cowlitz Clean Waters Regional Education and Outreach Campaign** – The City partners with other NPDES MS4 primary and secondary permittees within the Longview/Kelso area on a regional public information and education campaign under the brand “Cowlitz Clean Waters.” The City of Kelso, Cowlitz County, Consolidated Diking Improvement District #1, Kelso School District, Longview School District, Lower Columbia College and WSU Cowlitz County Extension collaborate with the City with the goal of reaching a county-wide audience on topics related to stormwater and water quality. In 2016, Longview, Kelso, Cowlitz County and CDID #1 approved an interlocal agreement to commit funding to the cooperative effort with the City serving as administrator of the program.

In 2018, Cowlitz Clean Waters produced an educational “Healthy Water Habits” poster and themed refrigerator magnets. Cowlitz Clean Waters also sponsored an inaugural stormwater video contest for high school students, as well as its second annual artwork and poetry contest for middle school students. Winners of the latter contest were featured in the Cowlitz Clean Waters 2019 “Solutions to Stormwater Pollution” calendar.



Cowlitz Clean Waters 2019 Calendar Featuring Student Artwork and Poetry

- ☑ **Website** – The SWMP, annual reports, stormwater regulations and other documents are available on the City of Longview’s primary website, [www.mylongview.com](http://www.mylongview.com), found on the *Stormwater* page under *Your Government / Departments / Public Works Department*.
- ☑ **Brochure** – The City produced the general *Solution to Stormwater Pollution* brochure in conjunction with the City of Kelso, Cowlitz County and CDID #1. This brochure is made available at public events, City Hall, and other venues.
- ☑ **Utility Bill Inserts** – The City’s stormwater brochure and a stormwater leaflet have been included several times within the City’s bimonthly utility bills.
- ☑ **City Newsletter and Social Media** – *City Info* (A newsletter for Longview citizens found on the City website) and the City’s Facebook page feature articles related to stormwater including: stormwater utility fee rates, pervious concrete, improving water quality, charity car wash fundraisers, stormwater management services, and how to report illicit discharges and stormwater pollution.
- ☑ **Paid Media Advertisements** – Paid ads in *The Daily News* (TDN) and the *Valley Bugler* have focused on general awareness of stormwater pollution, how to be part of the solution, and the local water pollution hotline.
- ☑ **Print Journalism** – Stories run by the local newspaper, *The Daily News* (tdn.com), covering the City’s stormwater program and activities.
- ☑ **Radio Interviews** – Interviews on local radio stations covering stormwater and water quality topics.
- ☑ **K-12 Education** – River Ranger presentations to Longview Public School District 4th grade classes focusing on the hydrologic cycle, stormwater pollution and its impacts, and Longview’s stormwater system and local waterways.
- ☑ **Charity Car Wash Program** – The City offers the use of three car wash kits for charity fundraiser car washes at approved locations. The kits include a storm drain insert, a hose and a pump to direct the wash waters to a sanitary sewer drain or landscaped area. The kit also includes a sign to inform the public that the car wash is an authorized “stormwater-friendly” event.
- ☑ **Training Workshops** – A series of training workshops provided to engineers, developers, and contractors covering the City’s stormwater regulations and manual, including topics such as flow control and treatment BMPs as well as Low Impact Development (LID) practices and approaches.



“Scoop the Poop” Refrigerator Magnet

The City has also offered a “Creating Your Own Rain Garden” class in cooperation with Washington State University (WSU) Extension and provided training workshops for developers and engineers.

- ☑ **Public Events** – Participation in a number of public events each year with a booth or table providing information and tips on stormwater pollution prevention. These events have included Earth Day (with hands-on education activities and games for kids), the Cowlitz County Home & Garden Show, Cowlitz County Open House and Lower Columbia Contactors Association 811 Awareness Breakfast.

In 2018, the City’s Stormwater Division participated once again in the Cowlitz County Earth Day Celebration in April in conjunction with Cowlitz Clean Waters. The City’s street sweeper, stormwater Vector truck and stormwater crews also took part in the Longview Christmas parade.



2018 Cowlitz County Earth Day Celebration

- ☑ **Storm Drain Markers** – The City originally partnered with a local church on a stewardship program to install storm drain markers. More than 3,000 stormwater inlets and catch basins were marked by volunteers over a 3-year period. 1,200 new stainless steel medallions were purchased in 2017 to replace the existing plastic storm drain markers that are deteriorating or missing. Installation of the new markers is being undertaken by City maintenance crews during scheduled inspection and cleaning of inlets and catch basins.
- ☑ **Market Analysis** – A comprehensive Stormwater Market Research Study was completed by the City in conjunction with the City of Kelso, Cowlitz County and CDID #1. This professional study was undertaken to evaluate the stormwater public education and outreach efforts to both the general public and target business audiences in the greater Longview-Kelso area.

- ☑ **Target Audience Study** – The City completed work on a study in 2016 to measure the adoption of target behaviors for a target audience (mobile carpet and interior cleaners) in conjunction with the City of Kelso and Cowlitz County.



Cowlitz Clean Waters “Healthy Water Habits” Poster

## Planned Activities

Planned activities for 2019 include:

- Ongoing participation with the Cowlitz Clean Waters partners on regional public education efforts, deliverables and activities which may include the following:
  - Website with stormwater information for residents and businesses
  - Social media presence with ongoing educational postings
  - Updated general stormwater brochure and new collateral materials focused on target audiences and behaviors
  - Stormwater video contest for high school students
  - Calendar art and poetry contest for middle school students
  - Video and radio public service announcements
  - Print media ads and articles in local papers
  - Outdoor advertising such as billboards and bus wraps
  - Public events such as the Cowlitz County Earth Day Festival
- Provide additional content on the City's stormwater web pages (*mylongview.com*).
- Use social media and new utility bill inserts to facilitate and further disseminate stormwater education and outreach messaging.
- Participate in additional public events (e.g. Squirrel Fest, Cowlitz Farmers Market).
- Create and install new educational/interpretive signage at municipal owned or maintained stormwater management facilities.
- Install new signage at all pet stations in City parks and public areas.
- Explore new opportunities for stewardship activities.
- Continue all other ongoing programs and activities.
- Track and document all public education and outreach efforts.

## PUBLIC INVOLVEMENT AND PARTICIPATION

The City's public involvement and participation program is designed to seek regular input from stakeholders and provide opportunities to provide feedback on the SWMP.



### Permit Requirements

*Provide ongoing opportunities for public involvement and participation through advisory councils, public hearings, watershed committees, participation in developing rate-structures or other similar activities.*

#### **Minimum Performance Measures:**

- Create opportunities for the public to participate in the decision-making processes involving the development, implementation and update of the SWMP.
- Post the SWMP Plan and Permit annual report on the City website no later than May 31 each year. All other submittals shall be available to the public upon request.

### Completed and Current Activities

- ☑ **Longview Stormwater Advisory Committee** – The Longview Stormwater Advisory Committee (LSAC) was prescribed and is governed by City Ordinance 1869 and Committee Bylaws. LSAC is comprised of five to seven appointed members who represent citizen, development, industry and environmental interests. LSAC's responsibilities are to assist, guide and make recommendations on the City's stormwater management program and policies. LSAC meetings are convened at least once quarterly, unless there is no business to be conducted.

LSAC provides extensive input and guidance on the development of the City's SWMP as well as stormwater policy, regulations and guidelines.

- Reporting** – The City posts its updated SWMP Plan and each year’s NPDES municipal stormwater permit annual report to *www.mylongview.com* no later May 31 each year.

## Planned Activities

Planned activities for 2019 include:

- Involve LSAC and other stakeholder groups in the update of the City's stormwater guidelines document which will provide additional information and technical guidance on meeting the City's stormwater regulations and requirements.
- Involve LSAC and other stakeholder groups in the review and revision of other applicable local development-related standards or enforceable documents related to implementing the City's stormwater regulations and guidelines.
- Publish the current SWMP Plan and 2018 NPDES Permit annual report to *www.mylongview.com* no later than May 31, 2019.
- Involve LSAC and other stakeholder groups in developing a strategy for implementing the new program requirements of the 2019 Permit.
- Involve LSAC and other stakeholder groups in the review and revision of the 2020 SWMP.
- Track and document all public involvement and participation efforts.

## ILLICIT DISCHARGE DETECTION AND ELIMINATION

The City's stormwater ordinance prohibits non-stormwater, illicit discharges into the MS4. The illicit discharge detection and elimination (IDDE) program guides City responses to spills and reports of potential polluting discharges to the municipal separate storm sewer system.



### Permit Requirements

*An ongoing program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into the MS4.*

#### **Minimum Performance Measures:**

- Continue mapping of the MS4 on an ongoing basis and update maps periodically.
- Implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the MS4, which includes escalating enforcement procedures and actions.
- Implement a compliance strategy that includes informal compliance actions such as public education and technical assistance as well as the enforcement provisions of the ordinance or other regulatory mechanism.
- Implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the MS4, which includes the following components:
  - Procedures for conducting investigations of the MS4, including field screening and methods for identifying potential sources.
  - A publicly listed and publicized hotline or other telephone number for public reporting of spills and other illicit discharges.
  - An ongoing training program for all municipal field staff.
  - Program to inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.

- Implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the MS4.
- Train staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, and illicit connections, to conduct these activities.
- Track and maintain records of the activities conducted to meet the IDDE program requirements.

## Completed and Current Activities

- ☑ **MS4 Mapping** – The City has both digital GIS maps and physical map books of its MS4 and stormwater infrastructure assets. This mapping is regularly updated to address new development as well as to meet the Permit requirements.

**Work continued in 2018 on updating the City's stormwater GIS datasets, including as-built information from City projects and private development.**

- ☑ **Stormwater Ordinance** – The City passed an ordinance in 2009 which prohibits non-stormwater illicit discharges and illegal connections to the MS4 and provides for escalating enforcement of violations. These provisions were updated in 2017 for consistency with the Permit and are codified as Longview Municipal Code (LMC) 17.90 – *Stormwater Illicit Discharge Prevention*.
- ☑ **IDDE Program** – The City developed an ongoing program and standard operating procedures (SOP's) to detect and identify non-stormwater discharges and illicit connections into the MS4. This program is based on information included in the Center for Watershed Protection IDDE guidance manual. The City's program includes windshield surveys undertaken by Stormwater Division staff in the field, responding to reports provided by other City staff and departments, dry weather outfall inspections performed on a rotating basis, and screening of inlets and catch basins for illicit discharges and illegal connections during regular inspection and cleaning activities.
- ☑ **Illicit Discharge Public Awareness and Education** – The City maintains both a telephone hotline (360-578-0900) in conjunction with the City of Kelso as well as an online customer service application (*Ask Longview*) on its website with a form for reporting illicit discharges, spills, and illegal dumping to the MS4. The City's stormwater public education and outreach program includes a major focus on informing businesses and the general public on water quality impacts associated with illicit discharges and improper disposal of waste.
- ☑ **Staff Training** – The City ensures that all staff involved with implementing the IDDE Program receive adequate training, including those responsible for either recognizing and reporting illicit discharges, spills, or illegal dumping and those who respond to them.
- ☑ **Recordkeeping** – The Stormwater Division tracks and keeps records of all IDDE reports/complaints, inspection, and remediation actions.

## Planned Activities

Planned activities for 2019 include:

- Continue to implement the current IDDE program.
- Review and update the MS4 maps and GIS data as needed for compliance with Permit requirements.
- Review and revise the City's program and SOP's based on the 2013 Ecology IDDE guidance document (*Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual*).
- Train new City staff and provide refresher training for other staff on recognizing and reporting illicit discharges, spills, or illegal dumping.
- Continue all required recordkeeping.

## CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT AND CONSTRUCTION SITES

The City's stormwater program promulgates and ensures compliance with standards for construction stormwater (erosion and sediment) control as well as permanent stormwater management on most development projects.



### Permit Requirements

*A program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities for both private and public development, including roads.*

#### **Minimum Performance Measures:**

- Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects that includes the Minimum Requirements, thresholds, and definitions in Appendix 1 of the Permit.
- A permitting process with site plan review, inspection, and enforcement capability for both public and private projects that meet the minimum thresholds, which includes the following components:
  - Review of all stormwater site plans for proposed development activities.
  - Site inspections of all permitted development sites that have high potential for sediment transport, prior to clearing and construction.
  - Site inspections of all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls.
  - Site inspections of all permitted development sites upon completion of construction, and prior to final approval or occupancy, to ensure proper installation of permanent stormwater facilities.
  - An enforcement strategy to respond to issues of non-compliance.

- Provisions to verify adequate long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities that are permitted and constructed, including:
  - Implementation of an ordinance or other enforceable mechanism that clearly identifies the party responsible for ongoing maintenance, requires regular inspections of facilities, and establishes enforcement procedures for compliance.
  - Maintenance standards that are as or more protective of facility function than those specified in the *Stormwater Management Manual for Western Washington*.
  - Annual inspections of all regulated stormwater treatment and flow control BMPs/facilities that discharge to the MS4.
  - Inspections of all permanent stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments every six months until 90% of the lots are constructed, or site is fully stabilized.
  - Maintain records of all inspections and enforcement actions.
- Make available, as applicable, Ecology's forms for the "Notice of Intent for Construction Activity" and "Notice of Intent for Industrial Activity" to representatives of proposed new development and redevelopment.
- Train all staff whose primary job duties are implementing the program, including permitting, plan review, construction site inspections, and enforcement.
- Review, revise and make effective local development-related codes, rules, standards, or other enforceable documents to incorporate Low Impact Development (LID) principles and LID BMPs as the preferred approach no later than June 30, 2017. Submit a summary of the results of the LID review and revision process no later than March 31, 2018.

## Completed and Current Activities

- ☑ **Stormwater Ordinance** – In 2009, the City Council adopted an ordinance with stormwater requirements for new development, redevelopment, and construction site projects for sites over one acre established in the 2007 Permit, as well as a set of local stormwater guidelines for smaller projects.

These regulations were updated in 2017 to be consistent with the Minimum Requirements, thresholds, and definitions in Appendix 1 of the 2012 Permit. These provisions are codified as Longview Municipal Code (LMC) 17.80 - *Stormwater Management*.

- ☑ **Low-Impact Development (LID)** – Beginning in mid-2016, the City reviewed all local development-related codes, rules, standards, or other enforceable documents for opportunities to incorporate Low Impact Development (LID) principles and BMPs as applicable the preferred and commonly-used approach to site development.

Based on the review, a set of proposed recommendations to revise various LMC code sections were reviewed by stakeholders and the Planning Commission in 2017 and subsequently considered and adopted through Ordinance 3351.

**A summary of the results of the LID review and revision process were submitted to Ecology in 2018 with the City's Permit annual report.**

- ☑ **Development Permitting and Review Process** – The City has in-place a development permitting process that includes site plan review, inspections, and enforcement capability for all public and private projects. The City's code enforcement provisions (LMC 1.33) are utilized to respond to issues of non-compliance. The Stormwater Division has responsibility for and performs all plan reviews, site inspections and code enforcement. The City updated its development permitting and review process in 2017, including the creation of new submission forms and checklists, to respond to the new stormwater regulations and thresholds included under the Permit.
- ☑ **Long-Term Operations and Maintenance** – LMC 17.80 includes provisions for the long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities that have been permitted by the City since the 2009 ordinance went into effect. Inspections of all regulated stormwater treatment and flow control BMPs/facilities that discharge to the MS4 are completed annually by the Stormwater Division.
- ☑ **Recordkeeping** – The Stormwater Division tracks and keeps records of all regulated plan reviews, construction inspections, and ongoing O&M of regulated BMPs/facilities.

**In 2018, the City began developing a stormwater compliance tracking system in the Lucity asset management system for managing inspection information for both public and private stormwater BMPs and facilities.**

- ☑ **State of Washington Permits** – The City makes available as applicable copies of NOI forms and general information on the Ecology stormwater permits for both Construction Activity and Industrial Activity.
- ☑ **Staff Training** – The City ensures that all staff involved with implementing the program receive adequate training, including those responsible for permitting, plan review, construction site inspections, and enforcement.

## Planned Activities

Planned activities for 2019 include:

- Continue to perform site plan review, inspection, and enforcement of all public and private projects that meet the minimum thresholds.
- Continue to ensure adequate long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities that have been permitted by the City since the 2009 ordinance went into effect.
- Complete development of the Lucyly stormwater compliance module for tracking BMP and facility inspections.
- Ensure all City staff are trained on the updated stormwater requirements, provisions and procedures.
- Create new public guidance materials and checklists for development-related activities.
- Continue all required recordkeeping.



**Stormwater Bioretention Facility Being Constructed at a New Development**

## MUNICIPAL OPERATIONS AND MAINTENANCE

The City's stormwater municipal operation and maintenance program helps to prevent the pollutants to the MS4 from City-owned and operated properties or operations, as well as to maintain adequate performance of MS4 components in compliance with applicable maintenance standards.



### Permit Requirements

*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.*

#### **Minimum Performance Measures:**

- Implement maintenance standards that are as or more protective, of facility function than those specified in the *Stormwater Management Manual for Western Washington* no later than June 30, 2017.
- Annual inspection of all City-owned or operated permanent stormwater treatment and flow control BMPs/facilities, and taking appropriate maintenance actions in accordance with the adopted maintenance standards.
- Spot checks of City-owned or operated permanent stormwater treatment and flow control BMPs/facilities after major storm events, with repairs or appropriate maintenance actions, as needed.
- Inspection of all City-owned or operated catch basins and inlets at least once no later than August 1, 2017 and every two years thereafter.
- Implement practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the City, including road maintenance activities under the City's functional control.

- Ongoing training program for City employees whose primary construction, operations or maintenance job functions may impact stormwater quality.
- Implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the City that are not covered by an Industrial Stormwater General Permit.
- Maintain records of inspections and maintenance or repair activities.

## Completed and Current Activities

- ☑ **O&M Performance Standards** – The City of Longview has adopted operations and maintenance guidance and stormwater facility maintenance standards consistent with the Stormwater Management Manual for Western Washington.
- ☑ **Facility/BMP Inspections and Maintenance** – The Stormwater Division performs annual inspection of all City-owned or operated permanent stormwater treatment and flow control BMPs/facilities and performs spot checks after major storm events. Repairs or appropriate maintenance actions are undertaken as informed or indicated by the inspection reports.
- ☑ **Catch Basin and Inlet Cleaning** – City-owned or operated catch basins and inlets are inspected and cleaned on a rotating basis by the Stormwater Division's field crews. In a typical year, approximately one-third of all of the catch basins are inspected and cleaned. Therefore, all of the catch basins are inspected and cleaned within a three-year period. All City-owned or operated catch basins and inlets were verified to have been inspected at least once from August 1, 2012 through August 1, 2017. At least 50% were cleaned in the past year and are on track to have been inspected/clean again by August 1, 2019.
- ☑ **Street Sweeping Program** – The City has a street sweeping program which has run two Elgin street sweepers on a full-time (40 hour/week) basis to sweep all public streets, alleys and parking lot. The program effectively cleans and removes potential pollutants and debris from all streets, alleys and parking lots on an approximately weekly basis.



The City purchased a new Ravo vacuum street sweeper in 2018, which is expected to improve the program's stormwater pollutant removal capabilities.

- ☑ **Municipal Pollution Prevention/Good Housekeeping Practices and SOPs** – The City has developed and implemented its *Municipal Stormwater O&M Manual* which includes stormwater pollution prevention/good housekeeping BMP's and standard operating procedures for all of its

municipally-owned and operated properties and operations. This includes streets, parking lots, buildings, parks and open space, right-of-ways, the City shop and maintenance yards, Parks and Recreation facilities, water treatment plant and all mobile operations for repair and maintenance of City rights-of-way, public areas and utilities.

- Municipal SWPPPs** – The City has also developed and implemented SWPPPs for all of the municipally-owned and operated heavy equipment maintenance or storage yards, and material storage facilities. This includes the City Shop (Streets, Stormwater, Traffic and Fleet Services), Utilities (Water and Sewer) Operations Center, Parks maintenance yard, Water Treatment Filter Plant, and the Mint Valley Golf Course maintenance shop.
- Staff Training** - The City ensures that all staff are properly trained on the Municipal Stormwater O&M Manual and the appropriate stormwater SOPs and SWPPPs for their property, operations and job activities.
- Recordkeeping** - The Stormwater Division tracks and keeps records of all ongoing O&M of the stormwater system, including regulated BMPs/facilities.

**The City began implementing its Lucity stormwater asset management system in 2018 for managing inspection and maintenance information for all stormwater infrastructure assets. Lucity is also used to track street sweeping program activities.**

## Planned Activities

Planned activities for 2019 include:

- Continue the annual inspection of all City-owned or operated permanent stormwater treatment and flow control BMPs/facilities and perform spot checks after major storm events.
- Continue the stormwater catch basin and inlet inspection and cleaning program. Consider alternate strategies for scheduling inspection/cleaning frequency based upon inspection records and needs.
- Continue implementation of stormwater pollution prevention/good housekeeping practices and standard operating procedures (SOPs) at all of its City-owned and operated properties and operations. Review and revise the City's O&M manual and SOP's as needed.
- Continue implementation of SWPPPs at all City-owned and operated heavy equipment maintenance/storage yards and material storage facilities. Review and revise the SWPPP documents as needed.
- Train new City staff and provide refresher training for other staff on the *Municipal Stormwater O&M Manual* and relevant maintenance procedures, SOP's and SWPPP's.
- Continue all required recordkeeping.

## COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

The City's stormwater management program currently complies with the Permit requirements for Total Maximum Daily Load (TMDL) designated waters.



### Permit Requirements

*Address requirements for any applicable TMDL approved for stormwater discharges from MS4s owned or operated by the City.*

#### **Minimum Performance Measures:**

- For applicable TMDL's listed in Appendix 2 of the Permit, comply with the specific requirements identified. The status of the TMDL implementation shall be included as part of the annual report submitted to Ecology.
- For applicable TMDL's not listed in Appendix 2, compliance with the Permit shall constitute compliance with those TMDL's.
- For TMDL's that are approved by EPA after this Permit is issued, Ecology may establish TMDL related permit requirements through future permit modification.

### Completed and Current Activities

- There are currently no applicable TMDL's within or to which the City's MS4 discharges.

### Planned Activities

Planned activities for 2019 include:

- The City's MS4 discharges to four water bodies currently on the 303(d) impaired water list: Lake Sacajawea and CDID #1 flood control ditches 3, 4 and 5. The City will comply with any new TMDL requirements.

## MONITORING AND ASSESSMENT

The City participates in and funds regional efforts for status and trends monitoring, effectiveness studies and source identification and diagnostic monitoring.



### Permit Requirements

*Applicable provisions for status and trends monitoring, effectiveness studies and source identification and diagnostic monitoring.*

#### **Minimum Performance Measures:**

- Status and Trends Monitoring (S8.B): *No requirements for southwest Washington permittees in the 2012 Permit.*
- Effectiveness Studies (S8.C): Permittees may choose either-
  - Option 1 - Pay into a collective fund to implement effectiveness studies undertaken by the Western Washington Stormwater Action Monitoring (SAM) program; or
  - Option 2 - Conduct stormwater discharge monitoring in accordance with Appendix 9.
- Source Identification and Diagnostic Monitoring (S8.D): Pay into a collective fund to implement the SAM Source Identification Information Repository (SIDIR) effort.

### Completed and Current Activities

- The City has chosen Option #1 to satisfy its Permit requirements for effectiveness studies and pays a sum of \$14,687 annually to Ecology to fund the collective effectiveness study program being undertaken by SAM.
- The City pays a sum of \$1,362 annually to Ecology to fund the collective SIDIR program being undertaken by SAM.

- The City has participated in, and has partially funded, the collaborative Lower Columbia Habitat Status and Trends Monitoring (HSTM) grant project which will recommend a regional status and trends monitoring program for the southwest Washington permittees in the upcoming Permit reissuance.

## Planned Activities

Planned activities for 2019 include:

- Continue to meet the effectiveness and SIDIR Permit requirements through the "Pay-in" approach.
- Review draft requirements for the upcoming 2019 reissuance of the Permit related to the regional status and trend monitoring program for southwest Washington permittees
- Continue collaborating with other southwest Washington permittees on strategies for implementation of the Lower Columbia HSTM monitoring program.



**SAM**  
Stormwater Action Monitoring

**Project Title**  
Business Inspection Stormwater Source Control Effectiveness Study



**Effectiveness Study**

**Lead Entity**  
City of Lakewood

**Partner**  
Aspect Consulting LLC, Cardno Inc.

*Collectively improving stormwater management*

Stormwater Action Monitoring (SAM) is a collaborative, regional stormwater monitoring program that is funded by more than 90 Western Washington cities and counties, the parts of Seattle and Tacoma, and the Washington State Department of Transportation. SAM's goal is to improve stormwater management to reduce pollution, improve water quality, and reduce flooding. We do this by measuring stormwater impacts on the environment and evaluating the effectiveness of stormwater management actions.

Questions about SAM? Send an email to SAMinfo@ecy.wa.gov

**Study goals**

This study's goals were to compile and analyze data from permittees' business inspections to identify:

- Which types of businesses are inspected;
- What best management practices (BMPs) are implemented well;
- What BMPs need improvement;
- Which business types need follow-up inspections to achieve proper and consistent BMP use; and
- Other factors that make stormwater source control inspections effective.



**Stormwater management problem**

Businesses with activities that can potentially cause stormwater pollution need to understand the value and effective use of stormwater source control and treatment BMPs. Some business sectors with high potential to pollute also have substantial employee turnover and untrained staff. This can lead to a lapse in implementation and maintenance of BMPs, resulting in polluted runoff entering the stormwater system. Stormwater managers can more effectively use staff time for these pollution prevention efforts if they know types of businesses to inspect, inspection frequency, which BMPs are most likely to be issues, and the most needed technical assistance.

**Project findings**

The study gathered survey responses from municipal stormwater permittees in western Washington. More than 47,300 inspection records were analyzed from 40 jurisdictions, Ecology's Local Source Control Partnership (LSCP), and the Urban Waters Initiative. The 27 types of businesses in the records were grouped into six business categories. The three most frequently inspected categories were:

- **Auto/boat:** vehicle sales, repair, maintenance, transportation, and fueling;
- **Food/retail:** food stores, restaurants, food production, and hotels; and
- **Land usage:** construction, recreation, and landscaping.

Inspection frequencies ranged from eight to 16 months. The auto/boat category had the most frequent inspections and it also had the most follow-up inspections focused on BMPs for cleaning and washing and for storing and covering materials to prevent leakage, spills, or contact with precipitation.

Other issues repeatedly identified across many business types included BMPs for housekeeping, spill planning, and transfer of materials. Regular attention to proper BMP use and BMP maintenance during inspections will likely help reduce the potential for lapses in proper BMP implementation and increase overall environmental compliance.



## 2019 PERMIT REISSUANCE

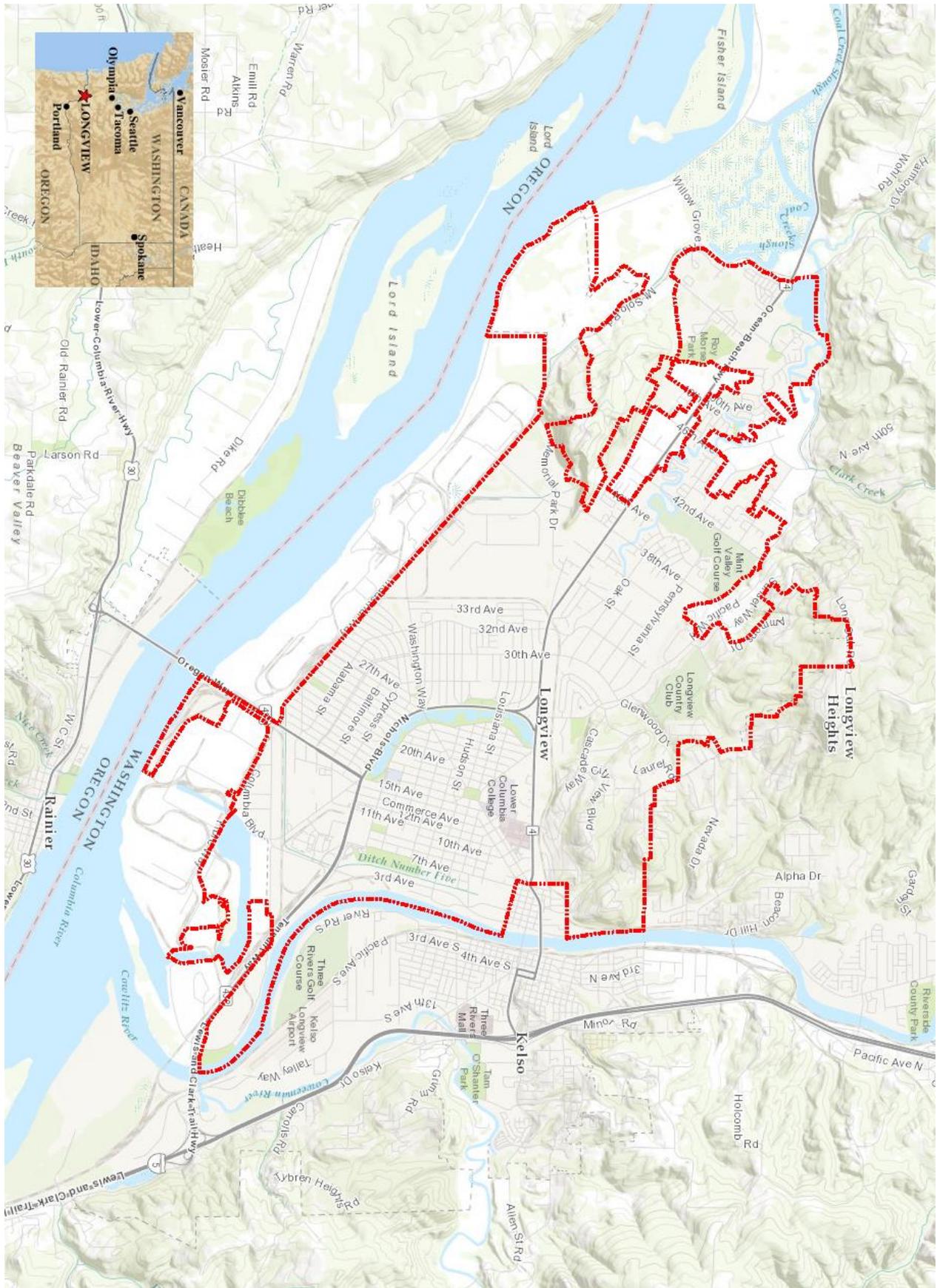
The Western Washington Phase II municipal stormwater permits expire on July 31, 2019. The Washington Department of Ecology will reissue the permits on July 1, 2019, effective Aug. 1, 2019.

The reissued permit includes organizational changes as well as several new requirements for the City to incorporate into its SWMP. These new programmatic components will be included in the 2020 SWMP document.



## 2019 Permit Highlights

- New ***Comprehensive Stormwater Planning*** program component – Contains new requirements that apply a more holistic view to municipal stormwater management including:
  - Coordination with long-range plan updates
  - Continuing consideration of LID principles and BMPs when updating, revising and developing new development-related codes and standards
  - Receiving water basin assessment to identify receiving waters that will benefit from stormwater management planning
  - Receiving water basin prioritization to identify and rank areas where the receiving waters may benefit from implementation of stormwater facility retrofits and management actions
- Stand-alone ***MS4 Mapping and Documentation*** program component (previously included under *Illicit Discharge Detection and Elimination*).
- Reorganized program components for ***Controlling Runoff from New Development, Redevelopment and Construction Sites*** and ***Operations and Maintenance*** moving all long-term O&M requirements to the latter program element.
- New ***Source Control Program for Existing Development*** program component – Intended to prevent and reduce pollutants in runoff from areas that discharge to MS4s. This will require the City to:
  - Adopt an ordinance requiring the application of source control BMPs for pollutant generating sources associated with existing land uses
  - Establish an inventory of properties which have the potential to generate pollutants
  - Implement an inspection program for the sites identified in the inventory



City of Longview and Environs

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The City of  
**Longview**  
Washington