

Stormwater Management Program Plan

National Pollutant Discharge Elimination System Western Washington Phase II Municipal Stormwater Permit



**COWLITZ COUNTY DEPARTMENT
OF PUBLIC WORKS**

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Figure 1. Cowlitz County’s Unincorporated Urbanized Area

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1.0 INTRODUCTION

1.1 Background and Purpose

Cowlitz County operates a Municipal Separate Storm Sewer System (MS4) to manage stormwater discharges in the Unincorporated Urban Area (UUA) adjacent to the cities of Longview and Kelso, Washington (**Figure 1**). Cowlitz County and its MS4 elements in the UUA are regulated under the federal National Pollutant Discharge Elimination System (NPDES) permit program through the Washington Department of Ecology's (Ecology's) Western Washington Phase II Municipal Stormwater Permit. The current 5-year permit was issued on August 1, 2012 with an effective date of August 1, 2013; it expires on July 31, 2018. The permit has continued to be implemented while Ecology is working through adoption of a new permit.

Cowlitz County implements a Stormwater Management Program (SWMP) to reduce the discharge of pollutants from the MS4 and protect water quality, as required by the Phase II NPDES Permit. This SWMP Plan serves as written documentation of the County's SWMP in accordance with Condition S5.A.2 of the Permit.

The purpose of this SWMP Plan is to (1) provide the public with a description of the County's SWMP and information about the County's current and planned stormwater management activities; and (2) provide Cowlitz County staff a central reference document for SWMP information and a tool for Permit compliance tracking. It is intended to be updated annually to reflect progress with and changes to the County's SWMP procedures and activities.

1.2 Document Content and Organization

The SWMP Plan is organized according to the major SWMP components required by Condition S5.C of the Permit, which include:

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

This Plan also addresses the County's SWMP-related Monitoring, Recordkeeping, and Training programs.

The main text of this document presents summary information for each major SWMP element, describing in general terms the related permit requirements, the County's completed and current SWMP activities, and activities the County plans to complete during the current Permit term (2013-2018).

Appendix A of this document contains a **Permit Condition and Action Table**, which states (verbatim) each condition from Section S5 (SWMP) of the Phase II NPDES Permit and presents the following information for each condition:

- The status of the County’s compliance efforts to date;
- Actions the County is planning to take to achieve and maintain compliance;
- An identification of staff responsibilities for implementing the actions needed to achieve and maintain compliance; and
- A schedule indicating when the County expects planned actions to be completed.

1.3 Additional SWMP References

The County’s procedures for implementing the SWMP are contained in a number of manuals that have been developed by the Department of Public Works. These manuals are referenced throughout this SWMP Plan and include the following:

- Illicit Discharge Detection and Elimination Program Manual
- Inspection and Enforcement Manual for Stormwater and Conveyance Facilities Regulated by Cowlitz County’s Stormwater Drainage Ordinance
- Stormwater Operations and Maintenance Program Manual
- SWMP Recordkeeping Procedures Manual
- SWMP Training Program Reference Manual

2.0 STORMWATER MANGEMENT PROGRAM (SWMP) COMPONENTS (S5.C)

The Phase II NPDES Permit requires that Cowlitz County’s SWMP include five major components, which are identified and addressed in the following subsections (2.1 through 2.5). This section of the document (1) summarizes the permit requirements for each major program component, (2) discusses the major actions the County has taken or is currently taking to comply with the permit conditions for each program component, and (3) describes the actions the County is planning to take during the course of the current Permit term (2013-2018) to comply with the permit conditions.

Please refer to the **Permit Condition and Action Table** in **Appendix A** for additional details, including compliance schedules.

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

2.1.1 Permit Requirements Summary

The Permit requires that Cowlitz County’s SWMP include 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.

The Permit establishes minimum performance measures for the education and outreach program on the following topics:

- Building General Awareness
 - General Public and Businesses
 - Engineers, Contractors, Developers, and Land Use Planners
- Effecting Behavior Change
 - General Public and Businesses
 - Residents, Landscapers, Property Managers/Owners
- Stewardship Opportunities/Partnerships
- Measuring Target Audience Understanding

2.1.2 Current Activities

Cowlitz County's Permit coverage area is part of the larger Longview-Kelso community, and the County has partnered with the cities of Longview and Kelso and area Phase II secondary permittees to implement community-wide public education and outreach activities. During the first Permit term (2007-2012), the County completed education and outreach activities that included:

- Entering into an Interlocal Agreement with the cities of Longview and Kelso and the Consolidated Diking Improvement District No. 1 (CDID #1) to facilitate cooperation in developing and using public education and outreach methods to fulfill permit requirements;
- Creating and distributing a *Solution to Pollution* brochure, which is posted on the County's web site;
- Sending a letter to local business owners notifying them of permit requirements relating to illicit discharges; and
- Conducting initial and follow-up telephone surveys of the general public and key businesses regarding stormwater knowledge and behaviors, and using this information to identify and prioritize education and outreach needs.

In 2013, the County joined with the cities of Longview and Kelso, as well as multiple area Phase II secondary permittees, to form the *Clean Water Partners* consortium. This group was formed to facilitate regional coordination on stormwater education and outreach activities aimed at both increasing general stormwater awareness and effecting behavior change. The County and *Clean Water Partners* have drafted an education and outreach plan and have begun the process of developing the program framework and implementation details.

2.1.3 Planned Activities

The County will be working as part of the *Clean Water Partners* to develop and implement public education and outreach activities throughout the current Permit term (2013-2018). These efforts will focus on communicating how each individual, student, or business can "be a part of the solution to water pollution" and emphasize the importance of keeping waters "fishable and swimmable." Education and outreach products will be consistent with the *Clean Water Partners*' central message, which is "Only Rain Down the Drain."

The County and Clean Water Partners will develop a schedule and budget for program activities in 2017. Activities currently planned as part of the education and outreach program include the following:

- Setting up informational booths at community events and distributing educational materials
- Presentations to local clubs and organizations (e.g., Kiwanis Club, Lower Columbia Contractors Association)
- Developing and maintaining a web site
- Radio advertising
- Encouraging nurseries to promote native plant use
- Encouraging homeowners to use native plants and avoid/limit pesticide applications
- Developing stewardship opportunities that involve removal of noxious weeds and planting native vegetation to reduce soil erosion and create buffer zones around streams

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

2.2.1 Permit Requirements Summary

The Permit requires that Cowlitz County provide ongoing opportunities for public involvement and participation through advisory councils, public hearings, watershed committees, participation in developing rate-structures or other similar activities. The County is required to comply with applicable state and local public notice requirements when developing elements of the SWMP.

The Permit establishes minimum performance measures for Public Involvement and Participation, which require the County to:

- Create opportunities for the public to participate in decision-making processes involving the development, implementation, and updating of the County's SWMP, and
- Post the SWMP Plan and annual reports to the County's web site.

2.2.2 Current Activities

The County has established a Stormwater Advisory Committee (SAC) that meets regularly to discuss SWMP-related issues. Applications to serve on the SAC are open to members of the public, providing the opportunity for direct participation in SWMP decision-making processes. The County also holds Public Hearings prior to the adoption of any new stormwater-related code or regulation, providing further opportunity for public involvement.

The County maintains a web site with information related to its SWMP, including the written SWMP Plan and annual reports. The web site also provides contact information for the County's Stormwater Coordinator, providing the public with the opportunity to request additional SWMP information, ask questions, and provide comments.

2.2.3 Planned Activities

The County will continue to hold regular SAC meetings as well as post this SWMP Plan to its web site, along with annual reports and SWMP Plan updates. The web site will also continue to provide contact

information for Department of Public Works staff who can field public questions, comments, and requests for additional information.

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

2.3.1 Permit Requirements Summary

The Permit requires that Cowlitz County's SWMP include an ongoing program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into the MS4. The Permit establishes minimum performance measures requiring that the County:

- Map its MS4
- Implement an ordinance or other regulatory mechanism to prohibit non-stormwater, illicit discharges into the County's MS4
- Implement a program to detect and identify non-stormwater illicit discharges to and connections with the County's MS4
- Implement a program to address illicit discharges, including spills and illicit connections, into the County's MS4
- Train staff who are responsible for identifying and addressing illicit discharges
- Track and maintain records of activities conducted to meet the above requirements

2.3.2 Current Activities

Cowlitz County currently implements an Illicit Discharge Detection and Elimination (IDDE) Program that was initially developed during the 2007-2012 Permit term. The County's IDDE Program is administered by the Department of Public Works. IDDE Program activities completed to date include:

- Maintaining a map of the MS4 for the County's Permit coverage area
- Development, implementation, and documentation of County procedures to detect, identify, and respond to illicit discharges. This includes:
 - Maintaining a public reporting system for illicit discharge reports
 - Documenting reports of illicit discharges received from the public, other departments, and outside agencies
 - Performing outfall inspections
 - Tracing the source of identified illicit discharges through Storm Drain Network Investigations or other means
 - Providing technical assistance to parties responsible for identified illicit discharges and working to promote voluntary compliance with IDDE regulations
 - Implementing corrective action and enforcement procedures until an identified illicit discharge is adequately addressed
- Holding training sessions for County staff (managers and field personnel) with responsibilities for IDDE Program implementation

2.3.3 Planned Activities

The County plans to continue implementing its IDDE Program activities for the duration of the 2013-2018 Permit term. Major changes to the program are not anticipated at this time. Planned activities include:

- Providing refresher training to County staff with IDDE Program responsibilities

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

2.4.1 Permit Requirements Summary

Cowlitz County is required by the Permit to implement and enforce a program to reduce pollutants in stormwater runoff to its MS4 from new development, redevelopment, and construction site activities. The program must apply to private and public development, including roads.

The Permit establishes minimum performance measures requiring that the County:

- Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects
- Implement a permitting process for development/construction activities that includes site plan review and site inspection and enforcement capabilities
- Implement a program to verify adequate long-term operation and maintenance of stormwater treatment and flow control facilities for permitted projects
- Provide copies of Ecology's Notice of Intent (NOI) forms to prospective applicants of development/construction projects
- Provide training to County staff with job responsibilities for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites.
- Review and revise existing development codes, rules, and standards to incorporate and require Low Impact Development (LID) principles and BMPs.

2.4.2 Current Activities

Cowlitz County currently implements a program to control stormwater discharges from construction and development sites that was developed during the current Permit term. Program activities completed to date include:

- Publishing a Stormwater Drainage Manual (2017) that identifies minimum stormwater management requirements and standards for development activities, in accordance with CCC 16.22 and consistent with the 2012 Stormwater Management Manual for Western Washington (SWMMWW)
- Inspecting permitted sites and stormwater facilities before, during, and after construction
- Maintaining records of construction site and stormwater facility inspections, corrective actions, and enforcement procedures

The County has documented procedures related to this program element in its *Inspection and Enforcement Manual for Stormwater and Conveyance Facilities Regulated by Cowlitz County's Stormwater Drainage Ordinance*. The Inspection and Enforcement Manual provides an overview of how stormwater from development and construction sites is regulated under CCC 16.22 and addresses inspection and enforcement procedures for stormwater and conveyance facilities. It serves as a reference to County staff responsible for completing inspections and enforcement actions under the Stormwater Drainage Ordinance.

2.4.3 Planned Activities

The County will continue to implement current runoff controls developed in accordance with the current Permit.

2.5 Municipal Operations and Maintenance (S5.C.5)

2.5.1 Permit Requirements Summary

Cowlitz County is required by the Permit to implement 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. The Permit establishes minimum performance standards for this program element that require the County to:

- Implement maintenance standards protective of stormwater facility function
- Annually inspect all County-owned or operated permanent stormwater treatment and flow control facilities, and take appropriate maintenance actions in accordance with adopted maintenance standards
- Perform spot checks of potentially damaged permanent stormwater treatment and flow control facilities after major storm events, and respond with appropriate repairs/maintenance in accordance with adopted maintenance standards
- Inspect all County-owned or operated catch basins at least once before August 1, 2017 and at least every two years thereafter, cleaning the catch basins if needed to comply with adopted maintenance standards
- Implement practices, policies, and procedures to reduce stormwater impacts associated with runoff from lands owned or maintained by the County, and road maintenance activities under the control of the County
- Implement a training program for County employees whose primary construction, operations, or maintenance job functions may impact stormwater quality
- Implement a Stormwater Pollution Prevention Plan (SWPPP) for heavy equipment maintenance or storage yards and material storage facilities
- Maintain records of inspection and maintenance/repair activities conducted by the County

2.5.2 Current Activities

Cowlitz County currently implements an Operations and Maintenance Program with the goal of preventing or reducing pollutant runoff from municipal operations. O&M Program activities completed to date include:

- Maintaining maintenance standards for stormwater and conveyance facilities that are consistent with those contained in Ecology's 2005 SWMMWW
- Performing inspections of catch basins and County-maintained stormwater facilities.
- Cleaning catch basins and maintaining stormwater facilities in accordance with the adopted maintenance standards
- Continual implementation of the SWPPP for the County's equipment maintenance and storage facilities
- Maintaining training for County employees with responsibilities for municipal O&M program activities

2.5.3 Planned Activities

The County will continue to implement its Stormwater O&M Program activities for the duration of the 2013-2018 Permit term. Major changes to the program are not anticipated at this time. Planned activities include:

- Continuing to implement inspection and maintenance activities and maintaining records for these activities
- Providing training to County staff with Stormwater O&M Program responsibilities

3.0 MONITORING (S8)

3.1 Permit Requirements Summary

Section S8 of the NPDES Permit details Permittee requirements for *Monitoring and Assessment*. Cowlitz County has responsibilities under this section of the Permit related to *Stormwater Management Program Effectiveness Studies* (S8.C) and *Source Identification and Diagnostic Monitoring* (S8.D).

The County is required to select one of two options for meeting effectiveness study obligations. Option #1 involves paying into a collective fund to implement Regional Stormwater Management Program (RSMP) effectiveness studies. Option #2 involves conducting stormwater discharge monitoring. The Permit requires that the County notify Ecology of the selected option by December 1, 2013.

To satisfy its source identification and diagnostic monitoring requirements, the County is required to pay into a collective fund to implement the RSMP Source Identification Information Repository (SIDIR).

3.2 Current Activities

Cowlitz County has notified Ecology of its intent to satisfy its effectiveness study monitoring requirements through Effectiveness Studies Option #1 of the Permit (S8.C.1), which involves paying into a collective fund to implement RSMP effectiveness studies.

3.3 Planned Activities

The County will continue to make annual RSMP effectiveness monitoring fund payments to Ecology. The annual payments will be in the amount of \$1,384, as required by the payment table in Section S8.C.1 of the Permit. Beginning August 15, 2014, the County will also continue to make annual payments in the

amount of \$128 to Ecology’s collective fund for implementing the RSMP SIDIR, in accordance with the payment table in S8.D.

In addition to the permit-required monitoring fund payments described above, the County has continued to participate in SW Region status and trends monitoring activities, in coordination with Ecology and other local agencies in SW Washington.

4.0 RECORDKEEPING (S5.A.3)

4.1 Permit Requirements Summary

Cowlitz County’s SWMP is required by Section S5.A.3 of the 2013 Permit to “include an ongoing program for gathering, tracking, maintaining, and using information to evaluate SWMP development, implementation and permit compliance and to set priorities.” The County is required by Section S9 of the Permit (Reporting Requirements) to keep all records related to the Permit and the SWMP for at least five (5) years and make these records available to the public upon request.

There are additional SWMP recordkeeping requirements in the Permit that require the County to track activities associated with individual program components, including inspections, enforcement actions, training, etc. The **Permit Condition and Action Table** in **Appendix A** documents each SWMP-related condition of the Permit, including those related to recordkeeping.

4.2 Current Activities

The County developed recordkeeping procedures for the major SWMP components during the 2007-2012 Permit term. The Department of Public Works documented these procedures in a ***SWMP Recordkeeping Procedures Manual***, which serves as a reference to County staff responsible for recording and tracking SWMP activities.

The Recordkeeping Procedures Manual describes the County’s processes for gathering, recording, and tracking information related to the County’s implementation of its SWMP. The Manual is organized according to the five major SWMP components required by the Permit. Each section of the manual summarizes major program activities associated with the respective SWMP component, identifies the relevant recordkeeping requirements, assigns responsibilities, and outlines procedures for meeting these requirements.

The County has developed a number of forms and tracking logs to standardize and help facilitate the SWMP recordkeeping processes. These forms and tracking logs are contained in the appendices of the Manual and include the following:

Recordkeeping Forms

- Stormwater Facility Inspection Form
- Water Quality Incident Report Intake Form
- IDDE Incident Response Form
- Outfall Inspection Form

SWMP Activity Tracking Logs

- Public Education and Outreach Activity Tracking Log
- Public Involvement and Participation Activity Tracking Log
- IDDE Incident Tracking Log
- IDDE Outfall Inspection Log
- IDDE Enforcement Action Tracking Log
- Construction Inspection Log for Stormwater and Conveyance Facilities
- Post-Construction Inspection and Maintenance Log for Privately Maintained Stormwater Facilities
- Stormwater Drainage Ordinance Enforcement Action Tracking Log
- Inspection and Maintenance Log for Publicly Maintained Stormwater Facilities

4.3 Planned Activities

The County plans to continue implementing its recordkeeping procedures for the 2013-2018 Permit term. Procedures will be updated on an as-needed basis in order to comply with conditions of the current Permit and/or to reflect process improvements made by the County. The County will update its ***SWMP Recordkeeping Procedures Manual*** to acknowledge the 2013 Permit and reflect any changes in recordkeeping procedures.

5.0 TRAINING (S5.C.3 – 5)

5.1 Permit Requirements Summary

The County is required by the Permit to provide training to County employees with responsibilities for SWMP implementation. The training requirements include those listed in the conditions below:

Illicit Discharge Detection and Elimination

Permit Condition S5.C.3.c(iii):

Each Permittee shall implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4. The program shall include the following components:

An ongoing training program for all municipal field staff, who, as part of their normal job responsibilities, might come into contact with or otherwise observe an illicit discharge and/or illicit connection to the MS4, on the identification of an illicit discharge and/or connection, and on the proper procedures for reporting and responding to the illicit discharge and/or connection. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of the trainings provided and the staff trained.

Permit Condition S5.C.3.e:

Permittees shall train staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, and illicit connections, to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

Controlling Runoff from New Development, Redevelopment, and Construction Sites**Permit Condition S5.C.4.e**

Each Permittee shall ensure that all staff whose primary job duties are implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

Pollution Prevention and Municipal Operations and Maintenance**Permit Condition S5.C.5.g**

Implement an ongoing training program for employees of the Permittee whose primary construction, operations or maintenance job functions may impact stormwater quality. The training program shall address the importance of protecting water quality, operation and maintenance standards, inspection procedures, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of training provided and the staff trained.

5.2 Current Activities

The County administers and implements a training program to ensure that staff with SWMP responsibilities are trained to conduct these activities. The Department of Public Works has developed a ***SWMP Training Program Reference Manual*** to guide County staff responsible for providing training as part of the County's SWMP. This Manual is organized into the following three sections to address specific training requirements contained in the Permit:

- Illicit Discharge Detection and Elimination
- Controlling Runoff from New Development, Redevelopment, and Construction Sites
- Pollution Prevention and Municipal Operations and Maintenance

Each section of the Manual summarizes the major program activities associated with the respective SWMP component, identifies the relevant training requirements from the Permit, and identifies training topics for specific County departments and staff. The Manual includes training materials to guide the County's training efforts for its SWMP.

5.3 Planned Activities

The County will continue to implement its existing training program and update as necessary to address the requirements of the 2013 Permit. Training efforts during the current Permit term will focus on (1) ensuring staff understand existing processes and responsibilities, and (2) ensuring staff understand changes in processes and responsibilities associated with the 2013 Permit.

The County will update its *SWMP Training Program Reference Manual* to account for program changes. Updates to the County's various procedure manuals will be communicated to employees and incorporated into the training.