

## **CITY OF KELSO PHASE II MUNICIPAL STORMWATER MANAGEMENT PROGRAM (SWMP)**

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.

Latest Update: December 2013

### ***PURPOSE***

The purpose of this Stormwater Management Program (SWMP) Plan is to document the City of Kelso's efforts as required by the Western Washington Phase II Municipal Stormwater Permit (Permit). The City received coverage under this Permit by submitting a Notice of Intent (NOI) to the Washington Department of Ecology (Ecology) on June 7, 2011.

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## EXECUTIVE SUMMARY

In 1987, Congress amended the federal Clean Water Act of 1972 and established water quality goals for surface waters (stormwater) of the United States. The National Pollutant Discharge Elimination System (NPDES) permit program is the mechanism under which these goals are implemented. The Environmental Protection Agency (EPA) administers the NPDES program nationwide and has delegated responsibility to administer the NPDES permit program to most states, including Washington.

The Clean Water Act established a two phase permit program. Phase I regulates larger and medium-sized municipalities and counties, construction site five acres or larger, and major industrial sources. Phase I was issued in 1995 to the cities of Seattle and Tacoma. In 1999, the counties of King, Pierce, Snohomish, and Clark also became regulated entities under the Phase I regulations.

Phase II regulates smaller jurisdictions, construction sites equal to or greater than one acre, and other industrial sources. In 2000, EPA finalized the NPDES Phase II rules regulating “small” municipal separate stormwater sewer systems (a.k.a. MS4s). On January 17, 2007, the Washington Department of Ecology (Ecology) issued a new Phase I and two new Phase II permits, one each for western and eastern Washington. The City of Kelso is now regulated as a MS4 under the Western Washington Phase II Municipal Stormwater Permit effective from August 2013 to August 2018, updated from the 2007 permit. The permit number is WAR04-5010.

These new requirements effectively prohibit non-stormwater discharges and require jurisdictions to apply controls to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP). Ecology is also using the permit to satisfy its own Water Pollution Control Act, RCW 90.48.

Phase II permits affect some 100 cities and 12 counties statewide, plus many other secondary and co-permittees such as diking districts, school districts, colleges, hospitals, and correctional facilities. Cities and counties covered by the permit must implement a Stormwater Management Program (SWMP). A general summary and timeline for the 2013-2018 Permit is shown in Table 1 below.

The Phase II permit program is structured around the following components:

- Public education and outreach program designed to measurably reduce stormwater pollution;

- Public involvement process to guide the development of the stormwater management program;
- Adoption of ordinances to control runoff from development, redevelopment, and construction activities;
- An illicit discharge detection and elimination (IDDE) program to identify and remove improper discharges into the storm sewer system; and
- An operation and maintenance program that reduces pollutant runoff from municipal operations.

Reporting requirements and detailed record-keeping are included to assess compliance and allow for making changes to improve water quality.

Permit obligations are legally binding and there are consequences for failure to comply with requirements. Ecology's approach to compliance during the first five-year permit cycle was technical assistance and it appears they will continue this approach with the current permit cycle. However, the CWA allows third-parties (citizens) to take legal action against jurisdictions failing to comply. Violators may be subject to penalties of up to \$37,500 per day per violation.

The following SWMP Plan provides the public and Ecology with information about how the City of Kelso is implementing the various program requirements of the Phase II permit.

The Phase II permit expiration date was extended. Ecology reissued the permit unmodified on August 1, 2012 at legislative direction to be effective through July 31, 2013. Permittees are to continue implementation of their SWMP Plan during this extension. One main exception is a requirement to inspect twenty percent of the catch basins and inlets during the extension.

Ecology also reissued the updated 2013 to 2018 Phase II permit on August 1, 2012 and it will become effective August 1, 2013.

Table 1: General Summary and Timeline for the 2013-2018 Permit

S5 Program Component	August 1, 2013 Ongoing program implementation	2014	2015	2016	2017	Jan-July 31, 2018
<b>A. Stormwater Management Plan</b>	Continue to track costs, actions and activities. Continue required internal and suggested external coordination and SWMP Plan submittal w/annual report. Update SWMP Plan annually.		<b>By March 31:</b> annual rpt includes description of internal coordination			
<b>C.1 Public Education and Outreach</b>	Continue public education and outreach program. Measure changes in behavior for 1 audience & 1 topic.	Create or partner w/others to create stewardship.		<b>By February 2:</b> use measures of behavior changes to improve program.		
<b>C.2 Public Involvement</b>	Continue to provide ongoing opportunities for the public to participate in SWMP decision-making. Post online annual reports and SWMP Plan for previous calendar year by 5/31 of each year.					
<b>C.3 Illicit Discharge Detection and Elimination (IDDE)</b>	Continue implementing the enforceable mechanism to prohibit illicit discharges, compliance strategy, IDDE and municipal staff training, citizen hotline and IDDE response, and maintain map of MS4.				<b>By Dec 31:</b> Field screen at least 40% of MS4 & on average 12% each year thereafter.*	<b>By Feb 2:</b> Update ordinance if needed.
<b>C.4.a-f Control Runoff from New Develop't, Redevelop't Construction Sites</b>	Continue to implement ordinance addressing construction/post-construx runoff controls; make NOIs for construction, industrial stormwater permits available; site plan review & permitting, requiring long-term maintenance; inspections; training; and enforcement.			<b>By Dec 31:</b> Update SW code to revised Appx 1 standards; review, revise, make effective developmt codes to make LID preferred approach. **	<b>By March 31:</b> Submit summary of review & revision of codes to reduce impervious surface, protect vegetation, minimize SW.	Achieve at least 80% of scheduled inspections.
<b>C.4.g Watershed scale stormwater planning (selected permittees)</b>	( <b>By Oct. 31, 2013</b> Phase I permittee notifies Ecology of selected basin and affected Phase II permittees; convenes planning process.)	( <b>By April 1:</b> Scope of work submitted to Ecology by Phase I watershed plan lead.)	Participate in planning process, if located within selected basin.	<b>By Oct 1:</b> Phase I lead submits final watershed scale stormwater plan to Ecology.		
<b>C.5 Municipal Pollution Prevention, Operation and Maintenance</b>	Continue implementation of MS4 maintenance; annually inspect SW trmt & flow control BMPs/facilities; spot checks; O&M & SWPPPs for municipal lands & facilities; staff training			<b>By Dec 31:</b> Update maintenance standards to revised manual/ code standards.**	<b>By August 1:</b> Inspect all catch basins or document alternatives if used. Plan to complete inspections every 2 years thereafter.*	Achieve 95% of inspections for municipal stormwater treatment/flow control BMPs/facilities and catch basins.

\*City of Aberdeen completes requirement by 6/30/2018. Report in fifth year annual report.

\*\*Lewis/Cowlitz county permittees complete requirement by 6/30/2017; City of Aberdeen by 6/30/2018. Report in next annual report.

## S8 Monitoring and Assessment

S8 Monitoring	August 1, 2013	2014	2015	2016	2017	July 31, 2018
<b>S8.A</b>	Continue to provide description in each annual report of stormwater monitoring or stormwater- related studies conducted by permittee or others (except if related to S8.B or S8.C).					
<b>S8.B Status and Trends Option #1</b>	<i>PS Permittees ONLY:</i>  <b>By Dec 31:</b> Notify Ecology which option selected for status and trends monitoring.	<i>PS Permittees ONLY :</i> <b>By Aug 15:</b> First annual payment to RSMP.				
<b>S8.B Status and Trends Option #2</b>		<b>By July 31:</b> Begin monitoring Wadeable streams.	<b>Oct 1:</b> Begin monitoring nearshore marine (if applicable).	Annual reporting as per Ecology-approved QAPP.		
<b>C. Effectiveness Option #1</b>	<b>By Dec 31:</b> Notify Ecology which option selected for effectiveness monitoring.	<b>By Aug 15:</b> Option #1 first annual payment to RSMP.				
<b>C. Effectiveness Option #2</b>		<b>By Feb 2:</b> Submit QAPP to Ecology. <b>By Oct 1:</b> Begin flow monitoring.	<b>Oct 1:</b> Stormwater monitoring program fully implemented.	Annual reporting as per Appendix 9.		
<b>S8.D Source ID &amp; Diagnostic Monitoring</b>		<b>By Aug 15:</b> First annual payment to RSMP.				

### Other significant elements of the permit

This is guidance only: see the permit for additional detail and related requirements.

<b>S1 Application for coverage</b>	Co-Permittees can end or amend agreements at any time.
<b>S4.F Response to violations of Water Quality Standards</b>	Notification and possible adaptive management may occur at any time.
<b>S7 Compliance with Total Maximum Daily Load (TMDL) Requirements</b>	Comply with applicable TMDL requirements listed in Appendix 2 per individual timelines.
<b>S9 Reporting</b>	Keep all records related to the permit for at least five years. Beginning March 31, 2015, submit a report for the previous calendar year using WAWebDMR or form provided by Ecology.
<b>G3 Notification of Discharge Including Spills</b>	Report to Ecology within 24 hours any discharge into or from the MS4 which could constitute a threat to human health, welfare or the environment.
<b>G.18 Duty to Reapply</b>	Apply for permit renewal no later than Feb. 2, 2018 (180 days before permit expiration).
<b>G20 Non-compliance Notification</b>	Notify Ecology within 30 days of becoming aware of permit non-compliance.

## S5.C1 PUBLIC EDUCATION AND OUTREACH

The SWMP shall include an education program aimed at residents, businesses, industries, elected officials, policy makers, planning staff, operations staff, and other employees of the Permittee. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. An education program may be developed locally or regionally and planned activities for public education and outreach are shown in Table 2 below.

### PROGRAM GOALS

The goals of the City of Kelso’s Stormwater Public Education Program are:

1. Increase Knowledge - To measurably increase the knowledge of the target audiences regarding the MS4, the impacts of storm water pollution on receiving waters, and potential solutions to mitigate the problems caused;
2. Change Behavior - To measurably change the waste disposal and runoff pollution generation behavior of target audiences by encouraging implementation of appropriate solutions;
3. Reach a Diverse Audience - To involve and engage a diverse audience in Kelso to participate in mitigating the impacts of storm water pollution; and
4. Implement a Public/Business/Employee Education Program That Meets Permit Requirements

Table 2: Public Education and Outreach: Planned Activities

Planned Activity	Due Dates
<b>1 Evaluate existing public education/outreach activities</b>	
<b>2 Identify individual responsible for public education/outreach</b>	
<b>3 Conduct public education workshop</b>	
Identify “gaps” in target audience	
Initiate framework for public education/outreach program	Ongoing with yearly
Initiate development of measurable goal	review
Conduct initial public opinion survey	
Evaluate results of public opinion survey	
<b>4 Draft framework for public education program (including feedback mechanism)</b>	
Prepare a formal education and outreach program document for submittal in the Annual Report	2/15/09
<b>5 Initiate activities program defined in the public education and outreach program</b>	
<b>6 Initiate summary of yearly public education/outreach activities for the Annual Report</b>	Annually

### *S5.C.1.a Education and Outreach*

The City's stormwater program maintains a full time stormwater manager. Through the efforts of this manager, the City has built upon its existing stormwater education by enhancing its website, producing informational mailings of the Ecology stormwater permit (Phase II Municipal permit) requirements to utility customers, and labeling storm drains. City managers and Council members have received technical presentations from Ecology educating them on basic stormwater and water quality protection principles as well as the requirements and importance of the Phase II Municipal permit. The City Council has also received a technical presentation on the proposed illicit discharge detection and elimination and stormwater management ordinances which they later adopted.

The City, in cooperation with local jurisdictions, developed a citizen's guide to clean runoff that addressed public awareness of stormwater pollution. The contents of this brochure, *The Solution to Stormwater Pollution*, were developed around the results from a 2008 telephone survey that is described in section S5.C.1.b below. The brochure was mailed out in 2008 to Kelso citizens and businesses with utility service.

#### **METHOD FOR DETERMINING TARGET AUDIENCE**

- Demographic information, such as age, income, and education.
- Economic information, such as types of commercial or development activities.
- Land-use data, pet licenses, population density and home ownership statistics.

#### **TARGET POLLUTANT**

- Specific local pollution problems

#### **PRIORITIZED TARGET AUDIENCES & BEHAVIORS**

##### **General Public**

- General impacts of stormwater flows into surface waters
- Impacts from impervious surfaces
- Source control BMPs and environmental stewardship actions and opportunities in the areas of pet waste, vehicle maintenance landscaping and buffers

##### **General public, businesses (home-based and mobile)**

- BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials
- Impacts of illicit discharges and how to report them

##### **Homeowners, landscapers and property managers**

- Yard care techniques protective of water quality
- BMPs for use and storage of pesticides and fertilizers
- BMPs for carpet cleaning and auto repair and maintenance
- Low Impact Development techniques, including site design, pervious paving, retention of forests and mature trees

- Stormwater pond maintenance
- Car washing

**Engineers, contractors, developers, review staff and land use planners**

- Technical standards for stormwater site and erosion control plans
- Low Impact Development techniques, including site design, pervious paving, retention of forests and mature trees
- Stormwater treatment and flow control BMPs

Methods to distribute information:

- Direct mailers
- Inserts in utility bills
- Presentations
- Classes
- Kids
- Radio ads
- TV -public service announcement
- Print-newspapers, yard signs

*S5.C.1.b Performance Measurement*

**PERFORMANCE MEASUREMENT**

- Methods of measuring behavior change
  - Perform initial survey of public behaviors to determine baseline
  - Conduct public education activities
  - Perform another survey of public behaviors
  - Compare results to initial survey to determine behavior change

A telephone survey was conducted in 2008 to measure the knowledge and practices regarding stormwater and pollution. Both the public and businesses were targeted. This baseline survey was a multi-agency endeavor, with Cowlitz County, the Cities of Kelso and Longview, and the Consolidated Diking Improvement District #1 all participating. A consulting firm was hired to develop and perform the telephone survey. A total of 390 surveys were completed with the adult public and 386 surveys were completed with businesses.

This survey has provided the baseline of general stormwater knowledge from which to improve. A second survey was completed in December 2010 and assessed improvements in general stormwater knowledge. The City is using the results to help develop their education and outreach program.

### *S5.C.1.c Recordkeeping*

The City tracks and maintains records of public education and outreach activities in accordance with this permit. Information about many of these activities are also posted on the City's website.

## S5.C.2 PUBLIC INVOLVEMENT AND PARTICIPATION

The SWMP shall include ongoing opportunities for public involvement through advisory councils, watershed committees, participation in developing rate structures, stewardship programs, environmental activities, or other similar activities. Each Permittee shall comply with applicable state and local public notice requirements when developing their SWMP. Planned activities for public involvement and participation are shown in Table 3 below.

Table 3: Public Involvement and Participation: Planned Activities

Planned Activity	Due Dates
<b>1 Evaluate existing public involvement/participation activities</b>	Ongoing
<b>2 Identify individual responsible for public involvement/participation</b>	-
<b>3 Develop ongoing public involvement/participation strategy</b> Create opportunities for public involvement Post the Annual Report and SWMP document on the City website Identify public involvement venues	Ongoing  Annually on 3/31 Ongoing
<b>4 Reporting</b> Initiate summary of public involvement/participation activities for the Annual Report Identify Annual Report attachments if needed	Annually on or before 3/31
<b>5 Plan public involvement/participation activities and responsibilities</b> Initiate SWMP document update if necessary Post the SWMP related documents on the City’s website along with an email address for public involvement Initiate planning of future public involvement/participation activities	Annually on or before 3/31

### *S5.C.2.a Public Participation*

The Kelso Stormwater Advisory Committee (KSAC) was formed in 2008 as an avenue for public participation and input. The KSAC meets quarterly and has 7 appointed members who represent different interests related to stormwater in the City. The members represent the environment, recreation, industrial permit holder, student, citizen, developer, and technical advisor. The KSAC has worked on the various requirements of this permit, including the IDDE Ordinance and the Stormwater Management Ordinance. People with interest in the City’s stormwater issues are welcome to participate as a KSAC member when positions become available, can talk with current KSAC members, or can attend KSAC meetings.

People can also participate through involvement with the City’s Planning Commission, City Council, or the region’s Watershed Committee (Grays-Elochoman & Cowlitz Watershed Planning Unit – WRIA 25/26).

### *S5.C.2.b Reporting*

Kelso maintains a website that includes posting of various stormwater documents, including those required by this permit. This website can be found at <http://stormwater.kelso.gov>.

## S5.C.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

The SWMP shall include an ongoing program to detect and remove illicit connections, discharges as defined in 40 CFR 122.26(b)(2), and improper disposal, including any spills not under the purview of another responding authority, into the municipal separate storm sewers owned or operated by the Permittee. Permittees shall fully implement an ongoing illicit discharge detection and elimination program no later than 180 days prior to the expiration of the Permit. Planned activities for illicit discharge detection and elimination are shown in Table 4 below.

Table 4: Illicit Discharge Detection and Elimination Plan: Planned Activities

Planned Activity	Due Dates
<b>1 Evaluate existing illicit discharge detection and elimination program</b>	Ongoing with annual review
<b>2 Develop Illicit Discharge Detection and Elimination Program</b> Develop and implement screening procedures Review and update illicit discharge response/source control procedures if necessary Review and update tracking/documentation procedures if necessary Review and supplement public education/outreach efforts if necessary (coordinate with the City's public education and outreach program) Develop inspection plan and enforcement team	8/19/2011
<b>3 Update storm sewer system map</b> Continue updates to the map geodatabase Develop procedures for additions and updates	Ongoing
<b>4 Update ordinances</b> Determine inspection and enforcement procedures Update City Municipal Code to address illicit discharges if needed	8/15/2009
<b>5 Evaluate and update current hotline procedures if necessary</b>	2/15/2009
<b>6 Develop training program</b> Review current training with respect to illicit discharges Identify additional training if necessary Draft framework for training program	8/15/2009
<b>7 Reporting</b> Initiate summary of prior year's IDDE activities for each Annual Report Identify Annual Report attachments if needed	Annually 3/31
<b>8 Plan future year's IDDE activities and responsibilities</b> Initiate SWMP document update if necessary Initiate planning of next year's IDDE activities	

### *S5.C.3.a Mapping*

The City developed a storm sewer system map in three phases completed in 2006, 2008 and 2013 as part of stormwater management plans for the City. The final phase combined data from all phases and is included in a Stormwater Management Plan and corresponding GIS geodatabase. This map provides locations of catch basins, manholes, pipelines as well as known municipal separate storm sewer outfalls and receiving waters and structural BMPs owned, operated, or maintained by the City. This map will be updated on an ongoing basis to correct inconsistencies in the geodatabase and as additional information becomes available. Also, when new additions or deletions are made to the existing infrastructure the stormwater map (geodatabase) will be updated.

### *S5.C.3.b Regulatory Mechanism*

The City developed their Illicit Discharge, Detection, and Elimination Stormwater Ordinance with input from City departments, the KSAC, the City of Longview stormwater advisory committee (LSAC) and consultants. It was formally adopted by the City Council in August 2009.

### *S5.C.3.c Procedures*

The City of Kelso's Public Works Department implements the City's IDDE program. The program goal is to provide for the health, safety, and general welfare of the citizens of the City through the regulation of non-stormwater discharges to the storm drainage system. The objectives of this program, per the IDDE Ordinance, are:

1. To regulate the contribution of pollutants to the stormwater drainage system by stormwater discharges by any user;
2. To prohibit illicit connections and discharges to the municipal separate storm sewer system; and
3. To establish legal authority to carry out all inspection, surveillance, and monitoring procedures necessary to ensure compliance with the Ordinance.

The specific procedures for IDDE program implementation are described in the Ordinance. Such procedures cover discharge prohibitions, suspension of stormwater drainage system access, industrial or construction activity discharges, inspection and sampling, use of best management practices, protection of water bodies, notification of spills, and enforcement.

The City is planning to build upon current IDDE activities to create a more identifiable program that includes:

- Procedures for locating priority areas likely to have illicit discharges;
- Procedures for tracing the source of an illicit discharge;

- Procedures for removing the source of the illicit discharge;
- Training for City staff on IDDE awareness; and
- Further public education of IDDE awareness.

### *S5.C.3.d Public Involvement*

Public involvement opportunities to comment on the development of this ordinance were made available. Three public meetings were conducted as part of the City's normal ordinance adoption process. During this time period, the public was offered the opportunity to review and comment on the ordinance.

The City developed a stormwater hotline for people to call to report unlawful discharges into stormwater. The Kelso stormwater hotline phone number is 423-6590 during normal business hours. Kelso's after-hours Operations phone number for street and utility issues including illicit discharges is 423-5730. A 24-hour Longview/Kelso stormwater hotline is also available at 578-0900. Additionally, two forms are posted on the City's website for public input. The forms include a stormwater incident report for citizens to report spills and illicit discharges as well as a "citizen concern form" for people to provide many types of concerns to the Public Works Department.

### *S5.C.3.e Program Evaluation*

As the IDDE program progresses through creation and maturity, the City will be evaluating its effectiveness on an on-going basis. The annual review and reporting requirements per the Permit ensure that these efforts are compiled and summarized at least annually.

### *S5.C.3.f Training*

The City has developed and implemented a formal training program for its staff related to the IDDE requirements.

## S5.C.4 CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES

Each Permittee shall develop, implement, and enforce a program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment, and construction site activities. This program shall be applied to all sites that disturb a land area one acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale. The program shall apply to private and public development, including roads. Planned activities for controlling runoff is shown in Table 5 below.

Table 5: Controlling Runoff from New Development, Redevelopment, and Construction Sites: Planned Activities

Planned Activity	Due Dates
<b>1 Evaluate existing runoff control program</b>	Annually
<b>2 Review and update KMC to address permit requirement, if necessary</b> Required thresholds and minimum requirements Site planning and BMP selection criteria that protect water quality, meet MEP, and satisfy AKART Legal authority to inspect new facilities Provisions for LID (or equivalent) Application of erosivity waiver	8/15/2009
<b>3 Plan review, inspection, and enforcement</b> Review and update plan review if necessary Develop inspection procedure plan Identify staff inspection team Update enforcement strategy if necessary Identify enforcement team Update KMC if necessary Develop mechanisms to track plan review, inspection, and enforcement actions Document NOIs for construction and industrial activities	8/15/2009
<b>4 Operation and maintenance</b> Update process for accepting new facilities or inspecting private facilities (keep private or go public) Document new stormwater systems for inspection, operation, and maintenance Update KMC to include long-term operation and maintenance requirements for phased construction Review BMP inspection frequency	8/15/2009
<b>5 Staff trained in plan review, inspections, and enforcement related to stormwater</b> Define training needs (who and what)	8/15/2009

Table 5: Controlling Runoff from New Development, Redevelopment, and Construction Sites: Planned Activities

Planned Activity	Due Dates
Identify supplemental training needs	
Develop training schedule	
Track training and summarize for Annual Report	
<b>6 Reporting</b>	
Initiate summary of plan review, inspection, and enforcement activities for Annual Report	Annually
Identify Annual Report attachments, if any	
<b>7 Plan next year’s runoff control activities and responsibilities</b>	
Initiate SWMP document update if necessary for Annual Report	Annually
Initiate planning of future runoff control activities	

### *S5.C.4.a Regulatory Mechanism*

The City drafted a Stormwater Management Ordinance with the help of City staff, consultants, KSAC, LSAC and was approved for adoption through the KSAC. The City formally adopted this ordinance in March 2010.

In conjunction with the development of this ordinance, the City revised applicable portions of the Kelso Engineering Design Manual (KEDM). This process ensured consistency between the ordinance and the KEDM. Additionally, the ordinance refers to KEDM in relation to specific technical issues easy user reference. The KEDM was also developed in conjunction with the City of Longview’s Stormwater Management Manual to create consistent development guidelines in the region. The KEDM revisions were adopted by ordinance concurrently with the Stormwater Management Ordinance.

### *S5.C.4.b Permitting*

The City’s permitting process includes plan review, inspection, and enforcement capabilities and is implemented through the Public Works and Planning Departments. Permitting requirements were updated through the Stormwater Management Ordinance and KEDM.

### *S5.C.4.c Maintenance Inspection (Private)*

The Stormwater Management Ordinance allows the City to make inspections on private stormwater facilities. The City is in the process of training its staff related to protection of stormwater quality at privately-owned properties. This includes proper operations and maintenance measures.

#### *S5.C.4.d Recordkeeping*

The City maintains inspection and enforcement records on permitted activities within the City boundaries. These records are located within both the Public Works and Planning Departments.

#### *S5.C.4.e Notice of Intent*

The “Notice of Intent for Construction Activities” and “Notice of Intent for Industrial Activities” are available at City Hall. The address for City Hall is 203 S. Pacific Avenue, Kelso, WA 98626.

#### *S5.C.4.f Training*

Currently, two staff members responsible for inspecting stormwater systems and issues have been formally trained and certified as Certified Erosion Sedimentation Control Leads (CESCL).

## S5.C.5 POLLUTION PREVENTION AND OPERATION AND MAINTENANCE FOR MUNICIPAL OPERATIONS

Within three years of the effective date of the Permit, each Permittee shall develop and implement an operations and maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing polluted stormwater runoff from municipal operations. Planned activities for pollution prevention and the operation and maintenance program are listed in Table 6 below.

Table 6: Pollution Prevention and Operation and Maintenance Program: Planned Activities

Planned Activity	Due Dates
<b>1 Evaluate existing pollution prevention and operation and maintenance program</b>	Ongoing with annual review
<b>2 Update inspection and maintenance program</b>	Ongoing
Define and quantify system for maintenance (e.g. type and size)	Ongoing
Catch basins	All inspected by 8/15/2011. Inspect 20 % of catch basins from August 1, 2012 through July 31, 2013
Stormwater treatment and flow control facilities	All inspected by 2/15/2012 on a 1-year schedule thereafter
Streets, roads, and highways	
Parks, open spaces, right-of-way	
Determine system maintenance for water quality	Ongoing, due 2/15/2010
Evaluate frequency of inspections	
Develop resource needs assessment for maintenance	
Fund and staff maintenance plan (not a SWMP requirement)	
Develop tracking mechanisms for inspections, maintenance, and repairs	
<b>3 Training of operation and maintenance staff</b>	
Identify operation and maintenance training needs (who and what)	
Update current training if necessary	2/15/2010
Develop ongoing training program	
Document training	
<b>4 Reporting</b>	
Initiate summary of the Pollution Prevention and Operation and Maintenance activities for the Annual Report	
Identify Annual Report attachments, if any	Annually
<b>5 Plan the Pollution prevention and O&amp;M activities and responsibilities</b>	
Initiate SWMP document update if necessary	
Initiate planning of 2009 Pollution Prevention and O&M activities	

### *S5.C.5.a Maintenance Standards*

The City has an O&M program with the ultimate goal of minimizing pollutant runoff from municipal operations. The program includes street and gutter sweeping, pipe and culvert cleaning, ditch maintenance, catch basin cleaning, snow and ice control, road repair, vegetation management and emergency stormwater system repairs. Stormwater facilities will be inspected annually. Catch basins and inlets will be inspected at least once every five years. Those requiring maintenance will be maintained within six months of the inspection.

### *S5.C.5.b Annual Inspection (Public)*

Stormwater facilities other than catch basins will be inspected annually and maintained, if necessary. Stormwater facilities identified for inspection include:

- Stormwater pond at west end of Allen Street Bridge
- CDS continuous deflective separation unit on North Pacific Avenue
- Stormceptor unit at Oak and 3<sup>rd</sup> Ave. parking lot

### *S5.C.5.c Spot Checks*

Spot checks of City stormwater facilities for water quality and quantity will be performed after rain storms larger than the 24-hour, 10-year storm event including documentation of the inspections.

### *S5.C.5.d Catch Basin Inspection*

As part of the stormwater system mapping, the City has been cleaning some catch basins in order to make measurements. All catch basins were inspected and cleaned by September 28, 2012. Twenty percent (20%) of the City's catch basins will be inspected and cleaned if necessary from September 29, 2012 through July 31, 2013.

### *S5.C.5.e Compliance*

The City intends to comply with inspection requirements described above. The City will review and update all procedures and practices to assure permit compliance and make adjustments as needed.

### *S5.C.5.f Practices to Reduce Stormwater Impacts*

The City plans to implement and refine practices and procedures to reduce stormwater impacts associated with runoff from streets, parking lots, roads and highways owned or maintained by

the City, as well as road maintenance activities conducted by the City. Activities that will be addressed include: pipe & culvert cleaning, ditch maintenance, street cleaning, road repair and resurfacing, snow and ice control, utility installation, pavement striping, maintaining roadside areas and vegetation, and dust control.

#### *S5.C.5.g Public Land Maintenance*

The City is committed to implementing policies and procedures regarding the maintenance of all public lands owned or maintained by the City. These lands include parks, open space, road right-of-way, maintenance yards and stormwater treatment and flow control facilities. Policies and procedures addressed include: application of fertilizers, pesticides and herbicides, sediment and erosion control, landscape maintenance, vegetation disposal, and cleaning and maintenance of building exteriors.

#### *S5.C.5.h Training*

The City developed a training program for its field staff in pollution prevention of its municipal operations and maintenance programs. This training program component was implemented by the Permit deadline of February 15, 2010. Further training of staff will occur when modifications to procedures and policy have been implemented.

#### *S5.C.5.i Stormwater Pollution Prevention Plans (SWPPP)*

A stormwater pollution prevention plan was drafted for the Operations maintenance facility. Operations staff have been trained on the SWPPP. The City plans to inspect, implement and maintain BMPs outlined in the SWPPP. Training will occur when the SWPPP is updated due to a change in design, construction, operation, or maintenance which cause(s) the SWPPP to be less effective in controlling the pollutants. The SWPPP can be found within the City's stormwater website at <http://stormwater.kelso.gov>.

#### *S5.C.5.j Recordkeeping*

The City will maintain records of inspections and maintenance or repair activities in accordance with the S9 Reporting Requirements of the Permit.