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WQWebSubmittal Home

WQWebPortal Home

FAQs

Help

Logout

# **Annual Report**

Number	Permit Section	Question
1	S5.A.2	Attach updated annual Stormwater Management Program Plan (SWMP Plan). (S5.A.2) Saved Document Name: Kelso_SWMP_2019_1_03222019105458
2	S9.D.5	Attach a copy of any annexations, incorporations or boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period per S9.D.5. Not Applicable
3	S5.A.3	Implemented an ongoing program to gather, track, and maintain information per S5.A.3, including costs or estimated costs of implementing the SWMP. Yes
4	S5.A.5.b	Coordinated among departments within the jurisdiction to eliminate barriers to permit compliance. (S5.A.5.b) Yes
5	S5.C.1.a.i and ii	Attach description of public education and outreach efforts conducted per S5.C.1.a.i and ii. Saved Document Name: Educational Outreach Efforts-2_5_03192019031253
6	S5.C.1.b	Created stewardship opportunities (or partnered with others) to encourage resident participation in activities such as those described in S5.C.1.b. Yes
8	S5.C.2.a	Describe the opportunities created for the public to participate in the decision making processes involving the development, implementation and updates of the Permittee's SWMP. (S5.C.2.a) Kelso held two public meetings of the Kelso Stormwater Advisory Committee whose purpose is to guide the development, implementation and updates to the City's SWMP. These meetings are advertised on the City's website and the public is invited to attend.
9	S5.C.2.b	Posted the updated SWMP Plan and latest annual report on your website no later than May 31. (S5.C.2.b) Yes

WQWebSubmittal - Search

Number	Permit Section	Question
9Ь	S5.C.2.b	List the website address.
		http://stormwater.kelso.gov
10	S5.C.3.a.i - vi	Maintained a map of the MS4 including the requirements listed in S5.C.3.a.ivi.
		Yes
11	S5.C.3.b.v	Implemented a compliance strategy, including informal compliance actions as well as enforcement provisions of the regulatory mechanism described in S5.C.3.b. (S5.C.3.b.v)
		Yes
		Updated, if necessary, the regulatory mechanism to effectively prohibit illicit discharges into the MS4 per S5.C.3.b.vi. (Required no later than February 2, 2018)
12	S5.C.3.b.vi	Yes
		Cite the Prohibited Discharges code reference
12b		KMC 13.09.050
13	S5.C.3.c.i	Implemented procedures for conducting illicit discharge investigations in accordance with S5.C.3.c.i.
		Yes
		Cite methodology
13b	S5.C.3.c.i	Implemented the City's Municipal Stormwater IDDE Program that incorporates methods outlined in the "IDDE: A Guidance Manual for Program Development and Technical Assessments" and in the Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual.
14	S5.C.3.c.i	Percentage of MS4 coverage area screened in reporting year per S5.C.3.c.i. (Required to screen 40% of MS4 no later than December 31, 2017 (except no later than June 30, 2018 for the City of Aberdeen) and 12% on average each year thereafter. (S5.C.3)
		43
15	S5.C.3.c.ii	List the hotline telephone number for public reporting of spills and other illicit discharges. (S5.C.3.c.ii)
		360-423-6590
15b	S5.C.3.c.ii	Number of hotline calls received.
150		7

WQWebSubmittal - Search

Number	Permit Section	Question
16	S5.C.3.c.iii	Implemented an ongoing illicit discharge training program for all municipal field staff per S5.C.3.c.iii.
		Yes
17	S5.C.3.c.iv	Informed public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste. (S5.C.3.c.iv)
	55.0.5.0.17	Yes
		Describe the information sharing actions. (S5.C.3.c.iv)
17b	S5.C.3.c.iv	The City educated staff of a motel, an appliance repair shop, a credit union, a fast food restaurant as well as various members of the public about illicit discharges and their effects of the local water bodies. The City continues to post documents on the City's website pertaining to illicit discharges.
18	S5.C.3.d	Implemented an ongoing program to characterize, trace, and eliminate illicit discharges into the MS4 per S5.C.3.d.
		Yes
19	\$5.C.3.d.iv	Number of illicit discharges, including illicit connections, eliminated during the reporting year. (S5.C.3.d.iv)
		6
20	S5.C.3.d.iv	Attach a summary of actions taken to characterize, trace and eliminate each illicit discharge found by or reported to the permittee. For each illicit discharge, include a description of actions according to required timeline per S5.C.3.d.iv
		Saved Document Name: Kelso IDDE Log_20_03192019034911
21	S5.C.3.e	Municipal illicit discharge detection staff are trained to conduct illicit discharge detection and elimination activities as described in S5.C.3.e.
		Yes
22	S5.C.4.a	Implemented an ordinance or other enforceable mechanism to address runoff from new development, redevelopment and construction sites per the requirements of S5.C.4.a.
		Yes
24	S5.C.4.a.i	Number of exceptions granted to the minimum requirements in Appendix 1. (S5.C.4.a.i., and Section 6 of Appendix 1)
		0
25	S5.C.4.a.i	Number of variances granted to the minimum requirements in Appendix 1. (S5.C.4.a.i., and Section 6 of Appendix 1)
23		0

4/18/2019		WQWebSubmittal - Search
Number	Permit Section	Question
26	S5.C.4.b.i	Reviewed Stormwater Site Plans for all proposed development activities that meet the thresholds adopted pursuant to S5.C.4.a.i. (S5.C.4.b.i) Yes
26b	S5.C.4.b.i	Number of site plans reviewed during the reporting period. 5
27	S5.C.4.b.ii	Inspected, prior to clearing and construction, permitted development sites that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7 Determining Construction Site Sediment Damage Potential, or alternatively, inspected all construction sites meeting the minimum thresholds adopted pursuant to S5.C.4.a.i. (S5.C.4.b.ii) Yes
27ь	S5.C.4.b.ii	Number of construction sites inspected per S5.C.4.b.ii. 2
28	S5.C.4.b.iii	Inspected permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. (S5.C.4.b.iii) Yes
28b	S5.C.4.b.iii	Number of construction sites inspected per S5.C.4.b.iii.
29	S5.C.4.b.ii, iii and	Number of enforcement actions taken during the reporting period (based on construction phase inspections at new development and redevelopment projects). (S5.C.4.b.ii, iii and v) 0
30	S5.C.4.b.iv	Inspected all permitted development sites that meet the thresholds in S5.C.4.a.i upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. (S5.C.4.b.iv) Yes
31	S5.C.4.b.ii-iv	Achieved at least 80% of scheduled construction-related inspections. (S5.C.4.b.ii-iv) Yes
32	S5.C.4.b.iv	Verified a maintenance plan is completed and responsibility for maintenance is assigned for projects. (S5.C.4.b.iv) Yes

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18/2019		WQWebSubmittal - Search
Number	Permit Section	Question
33	S5.C.4.c	Implemented provisions to verify adequate long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities that are permitted and constructed pursuant to S5.C.4. a and b. (S5.C.4.c) Yes
35	S5.C.4.c.iii	Annually inspected stormwater treatment and flow control BMPs/facilities per S5.C.4.c.iii. Yes
35b	S5.C.4.c.iii	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.4.c.iii Not Applicable
36	S5.C.4.c.iv	Inspected new residential stormwater treatment and flow control BMPs/facilities and catch basins every 6 months per S5.C.4.c.iv to identify maintenance needs and enforce compliance with maintenance standards. Not Applicable
37	S5.C.4.c.v	Achieved at least 80% of scheduled inspections to verify adequate long-term O&M. (S5.C4.c.v) Yes
38	S4.C.4.c.vi	Verified that maintenance was performed per the schedule in S5.C.4.c.vi when an inspection identified an exceedance of the maintenance standard. Yes
38b	S5.C.4.c.vi	Attach documentation of any maintenance delays. (S5.C.4.c.vi) Not Applicable
39	S5.C.4.d	Provided copies of the Notice of Intent for Construction Activity and Notice of Intent for Industrial Activity to representatives of proposed new development and redevelopment. (S5.C.4.d) Yes
40	S5.C.4.e	All staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement are trained to conduct these activities. (S5.C.4.e) Yes
42	S5.C.4.g	Participated and cooperated with the watershed-scale stormwater planning process led by a Phase I county. (S5.C.4.g) Not Applicable

4/18/2019		WQWebSubmittal - Search		
Number	Permit Section	Question		
43	S5.C.5.a	Updated and implemented maintenance standards as protective, or more protective, of facility function as those specified in Chapter 4 of Volume V of the 2012 Stormwater Management Manual for Western Washington. (Required no later than December 31, 2016, except no later than June 30, 2017 for Permittees in Lewis and Cowlitz counties, and no later than June 30, 2018 for the City of Aberdeen, S5.C.5.a) Yes		
44	S5.C.5.a	Applied a maintenance standard that is not specified in the Stormwater Management Manual for Western Washington. No		
45	S5.C.5.a.ii	Performed timely maintenance per S5.C.5.a.ii. Yes		
46	S5.C.5.b	Annually inspected all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities. (S5.C.5.b) Yes		
46b	S5.C.5.b	Number of known municipally owned or operated stormwater treatment and flow control BMPs/facilities. (S5.C.5.b) 10		
46c	S5.C.5.b	Number of facilities inspected during the reporting period. (S5.C.5.b) 10		
46d	S5.C.5.b	Number of facilities for which maintenance was performed during the reporting period. (S5.C.5.b)		
47	S5.C.5.b	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.5.b. Not Applicable		
48	S5.C.5.c	Conducted spot checks and inspections (if necessary) of potentially damaged stormwater facilities after major storms as per S5.C.5.c. Not Applicable		
49b	S5.C.5.d	Number of known catch basins. 1484		

WQWebSubmittal - Search

Number	<b>Permit Section</b>	Question	
49c	S5.C.5.d	Number of catch basins inspected during the reporting period. 695	
49d	S5.C.5.d	Number of catch basins cleaned during the reporting period. 110	
50	S5.C.5.d.i-ii	Attach documentation of alternative catch basin cleaning approach, if used. (S5.C.5.d.i or ii) Not Applicable	
51	S5.C.5.f	Implemented practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee. (S5.C.5.f) Yes	
52	S5.C.5.g	Implemented an ongoing training program for Permittee employees whose primary construction, operations or maintenance job functions may impact stormwater quality. (S5.C.5.g.) Yes	
53	S5.C.5.h	Implemented a Stormwater Pollution Prevention Plan for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in areas subject to this Permit that are not required to have coverage under an NPDES permit that covers stormwater discharges associated with the activity. (S5.C.5.h) Yes	
54	S7.A	Complied with the Total Maximum Daily Load (TMDL)-specific requirements identified in Appendix 2. (S7.A) Not Applicable	
55	S7.A	For TMDLs listed in Appendix 2: Attach a summary of relevant SWMP and Appendix 2 activities to address the applicable TMDL parameter(s). (S7.A) Not Applicable	
56	S8.A	Attach a description of any stormwater monitoring or stormwater-related studies as described in S8.A. Not Applicable	
57	S8.B.1	Participated in cost-sharing for the regional stormwater monitoring program (RSMP) for status and trends monitoring. (S8.B.1) Yes	

4/1	8	/20	1	9

8/2019		WQWebSubmittal - Search	
Number	Permit Section	Question	
58	S8.C.1	Participated in cost-sharing for the regional stormwater monitoring program (RSMP) for effectiveness studies. (S8.C.1) (Required to begin no later than August 15, 2014) Yes	
59	S8.D.1	Contributed to the RSMP for source identification and diagnostic monitoring information repository in accordance with S8.D.1. (Required to begin no later than August 15, 2014) Yes	
60	G3	Notified Ecology in accordance with G3 of any discharge into or from the Permittees MS4 which could constitute a threat to human health, welfare or the environment. (G3) Not Applicable	
61	G3	Number of G3 notifications provided to Ecology. 0	
62	G3.A	Took appropriate action to correct or minimize the threat to human health, welfare, and/or the environment per G3.A. Not Applicable	
63	S4.F.1	Notified Ecology within 30 days of becoming aware that a discharge from the Permittee's MS4 caused or contributed to a known or likely violation of water quality standards in the receiving water. (S4.F.1) Not Applicable	
64	S4.F.3.a	If requested, submitted an Adaptive Management Response report in accordance with S4.F.3.a. Not Applicable	
65	S4.F.3.d	Attach a summary of the status of implementation of any actions taken pursuant to S4.F.3 and the status of any monitoring, assessment, or evaluation efforts conducted during the reporting period. (S4.F.3.d) Not Applicable	
66	G20	Notified Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance. (G20) Not Applicable	
67	G20	Number of non-compliance notifications (G20) provided in reporting year.	

Number	Permit Section	Question
67b	G20	List the permit conditions described in non-compliance notification(s). Not Applicable
Attachmont		

#### Attachments:

# View Files Attached to Submission

	DocDescr	DocName	DocExt	DocID	SubID	AppName
View	Submitted Copy of Record for City of Kelso	Copy of Record CityofKelso Monday April 1 2019	.pdf	790644	1666761	wqwebportal
View	Submitted Cover Letter for City of Kelso	Cover Letter CityofKelso Monday April 1 2019	.pdf	790645	1666761	wqwebportal
View	2019 Calendar - Cream Version-Final	Cream Version-Final	.pdf	788097	1666761	wqwebportal
View	WAR045010_5_03192019031253	Educational Outreach Efforts-2_5_03192019031253	.pdf	788099	1666761	wqwebportal
View	WAR045010_20_03192019034911	Kelso IDDE Log_20_03192019034911	.pdf	788114	1666761	wqwebportal
View	WAR045010_1_03222019105458	Kelso_SWMP_2019_1_03222019105458	.pdf	788716	1666761	wqwebportal
View	Healthy Water Habits poster	Poster V7b	.pdf	788724	1666761	wqwebportal

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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.

#### Stormwater Management Program Plan 2019 for

City of Kelso

Prepared for: City of Kelso, Washington

Prepared by: Otak, Inc. 700 Washington Street, Suite 401 Vancouver, WA 98660 Otak Project No. 17258



January 2015

Updated March 2019 by Van McKay, P.E., City of Kelso

١.		1
	1.1 Overview and Background	
	1.2 Departmental Responsibilities	2
	1.3 Document Organization	2
2.	STORMWATER MANAGEMENT PROGRAM	3
	2.1 Public Education and Outreach	3
	2.2 Public Involvement and Participation	4
	2.3 Illicit Discharge Detection and Elimination (IDDE)	4
	2.4 Controlling Runoff from Development, Redevelopment, and Construction Sites	6
	2.5 Municipal Operations and Maintenance (O&M)	8
	2.6 NPDES Program Administration	10
3.	STORMWATER MONITORING	11

# Abbreviation and Acronyms

AKART	All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment
BMP	Best Management Practice
City / Kelso	City of Kelso
Ecology	Washington State Department of Ecology
IDDE	Illicit Discharge Detection and Elimination
KMC	Kelso Municipal Code
KSAC	Kelso Stormwater Advisory Committee
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
Permit	Phase II Western Washington NPDES Municipal Stormwater Permit
SIDIR	Source Identification Information Repository
SWMMWW	Stormwater Management Manual for Western Washington
SWMP	Stormwater Management Program Plan
SWPPP	Stormwater Pollution Prevention Plan

# CITY OF KELSO STORMWATER MANAGEMENT PROGRAM 2018

# I. INTRODUCTION

# I.I Overview and Background

The City of Kelso (City) operates a municipal separate storm sewer system (MS4) which collects and conveys stormwater runoff from developed areas of the City to surface waters. Discharge of runoff from the MS4 is regulated by the Washington State Department of Ecology (Ecology), and the City is required to obtain a permit to operate the MS4.

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 federal Clean Water Act. As a general permit, the Permit applies to more than 80 MS4s in western Washington. Kelso was first issued a Permit in 2007 and has been implementing a Stormwater Management Program Plan (SWMP) since that time.

To document progress toward Permit compliance, each permittee is required to develop a SWMP that includes a description of the required activities and is required to implement activities within the required timeframes of the Permit term and submit annual reports to Ecology by March 31<sup>st</sup> of the following year.

Ecology issued the current Permit in 2012, and it became effective on August 1, 2013. Ecology subsequently issued a Permit modification on December 17, 2014, which became effective January 16, 2015. The Permit modification includes minor changes to correct inconsistencies and scriveners' errors, changes to definitions to clarify the intent of some Permit language, and substantial changes to the watershed-scale stormwater planning requirement, which is not applicable to the City. The Permit covers a five-year period from August 2013 to July 2018 and Ecology subsequently extended that period to July 2019.

Stormwater runoff via the MS4 eventually enters the Cowlitz and Coweeman Rivers through a combination of gravity outfalls and pump stations operated by the Diking Improvement District No. 1 and the Consolidated Diking Improvement District No. 3. The City's MS4 also connects to and discharges stormwater to the City of Longview's MS4.

In accordance with Permit requirements, the City has developed a SWMP designed to reduce the discharge of pollutants to the maximum extent practicable (MEP), to meet all known, available, and reasonable methods of prevention, control and treatment (AKART) requirements, and to protect water quality. A main goal of the SWMP is to inform the public of the stormwater activities the City plans to achieve during the year. The following sections describe the actions that Kelso has and will take to comply with the requirements of the Permit.

# 1.2 Departmental Responsibilities

The Community Development Department employs a full-time Senior Stormwater Engineer, who acts as the City's National Pollutant Discharge Elimination System (NPDES) Coordinator.

The Community Development Department is responsible for general Permit compliance, stormwater public education and outreach, public involvement in stormwater concerns, regulating the entrance of stormwater pollutants into the MS4, regulating runoff on construction sites and developments, developing procedures for compliance with the Permit, planning stormwater capital projects, training staff from other departments, and reporting.

The Operations Department is responsible for spill response, maintaining components of the MS4, and operating City properties such as roads, rights-of-way, parks, and municipal buildings in a manner that prevents and reduces stormwater impacts.

Employees in the Police Department are responsible for maintaining awareness of the stormwater system and reporting potential illicit discharges that may be observed during the normal course of their duties in the community.

The City's stormwater utility funds the SWMP and is based on impervious area for commercial properties and on a base rate for residential properties.

# 1.3 Document Organization

This report comprises the required written documentation of the City's SWMP.

To aid in tracking Permit requirements, this document has been organized into sections that correspond with the Permit Special Conditions and are outlined in the Permit as follows:

- Chapter 2 Stormwater Management Program
  - o 2.1 Public Education and Outreach, Special Condition S5.C.1
  - o 2.2 Public Involvement and Participation, Special Condition S5.C.2
  - o 2.3 Illicit Discharge Detection and Elimination (IDDE), Special Condition S5.C.3
  - 2.4 Controlling Runoff from New Development, Redevelopment, and Construction Sites, Special Condition S5.C.4
  - 2.5 Operation and Maintenance (O&M) for Municipal Operations, Special Condition S5.C.5
  - 2.6 NPDES Program Administration
- Chapter 3 Stormwater Monitoring

# 2. STORMWATER MANAGEMENT PROGRAM

This chapter describes five required components of the Permit SWMP and the City's plan to meet each requirement and administer the program.

# 2.1 Public Education and Outreach

The City's public education and outreach program focuses on building general awareness among the public of problems created by stormwater runoff and of behavior changes to clean up local surface waters. The program is carried out by the NPDES Coordinator.

## 2.1.1 Permit Requirements

Section S5.C.1 requires the following:

- Develop and administer an education program 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 program must target residents, businesses, industry, and city employees at all levels.
- Provide an education and outreach program designed to educate target audiences about the stormwater problem and provide specific actions they can follow to minimize the problem.
- Measure adoption of targeted behaviors for at least one target audience in at least one subject area. Use the resulting measurements to direct outreach resources most effectively and to evaluate changes in adoption of the targeted behaviors and evaluation of the education program's effectiveness at changing targeted behaviors.
- Create stewardship opportunities to encourage residents to participate in activities such as stream teams, storm drain marking, volunteer monitoring, and riparian plantings.

## 2.1.2 Existing Programs and Activities

Kelso's activities in this area are ongoing:

- Continue to maintain the City's stormwater educational website at <a href="https://www.kelso.gov/engineering/stormwater/stormwater-documents">https://www.kelso.gov/engineering/stormwater/stormwater-documents</a>.
- Make available to the public the *Solution to Stormwater Pollution* brochure.
- Coordinate a storm drain marker volunteer program.
- Track and document all public education and outreach efforts.

#### 2.1.3 Planned Activities

Planned activities for 2019 include:

- Send remaining *Solution to Stormwater Pollution* brochures to residences through regular mail or utility inserts.
- Update the Solution to Stormwater Pollution brochure
- Implement a program to educate a target audience.
- Update the City's outreach plan based on results of measurement.
- Continue to develop stewardship opportunities with Kelso High School.

• Collaborate activities with the Cowlitz Clean Water Partners to produce educational materials, including bus ads, pet waste signs, refrigerator magnets, student art calendars and student public service announcement videos.

# 2.2 Public Involvement and Participation

The City's public involvement and participation program is designed to seek regular input from stakeholders through the Kelso Stormwater Advisory Committee (KSAC). KSAC members exhibit an interest in the quality of surface waters within and around Kelso and include a variety of stakeholders. The NPDES Coordinator is a liaison to KSAC and carries out this requirement.

## 2.2.1 Permit Requirements

Section S5.C.2 requires the following:

- Provide ongoing opportunities for public involvement through advisory councils, public hearings, watershed committees, participation in developing rate structures or other similar activities.
- Create opportunities for the public to participate in the decision-making processes involving the development, implementation and update of the SWMP.
- Make the SWMP document and Annual Report available to the public on the City's website. Any other submittals required by Ecology also must be available on the website.

# 2.2.2 Existing Programs and Activities

Kelso's activities in this area are ongoing:

- Holds quarterly public meetings of KSAC.
- Seeks public input through the City Council.
- Posts annual reports, the SWMP, and other stormwater-related documents to the City's website.
- Track and document all public involvement and participation efforts.

## 2.2.3 Planned Activities

Planned activities for 2019 include:

- Continue to hold quarterly meetings of KSAC.
- Update the SWMP for 2020 by December 31, 2019.
- Post the 2020 SWMP to the website by January 2020
- Post the 2019 Annual Report to website by May 2020.

# 2.3 Illicit Discharge Detection and Elimination (IDDE)

The City's IDDE ordinance prohibits the discharge of anything that is not stormwater, with a few exceptions, into the MS4. The IDDE program guides City responses to spills and to reports of potential discharges to the storm sewer. Staff monitors the system through inspection of priority outfalls. During the Permit term, the City plans to update its MS4 maps and increase system monitoring through a greater number of outfall inspections. The program is carried out primarily by

Community Development, although primary responsibility for spill response is with the Operations Department.

#### 2.3.1 Permit Requirements

Section S5.C.3 requires the following:

- Implement an ongoing program to prevent, detect, characterize, trace, and eliminate illicit discharges, connections and improper disposal into the MS4.
- Develop a storm sewer system map and update it on an ongoing basis.
- Implement an ordinance to prohibit non-stormwater, illicit discharges into the MS4 that includes allowable discharges, conditionally allowable discharges, and escalating enforcement procedures and actions.
- Implement a compliance strategy that includes informal compliance actions such as public education and technical assistance as well as escalating enforcement penalties and an enforcement strategy. Include the following tools:
  - Apply operational and structural source control Best Management Practices (BMPs) for pollutant generating sources to prevent illicit discharges.
  - o Maintain stormwater facilities to standards to prevent illicit discharges.
- Implement an ongoing program to detect and identify non-stormwater discharges and illicit connections to the MS4, including the following components:
  - Procedures for conducting investigations of the MS4, including field screening and methods for identifying potential sources of illicit discharges and connections.
  - Publicize a hotline or other local telephone number for reporting of spills or other illicit discharges.
  - Provide appropriate training to City field staff on identification and reporting of illicit discharges.
  - Inform public employees, businesses, and the general public of the hazards associated with illicit discharges and improper disposal of waste.
- Implement an ongoing program to address illicit discharges and illicit connections, including the following components:
  - Procedures for characterizing the nature of, and threat posed by, any illicit discharges found by or reported to the City, including evaluating if the discharge must be immediately contained.
  - Procedures for tracing the source of an illicit discharge, including visual inspection and other methods and procedures.
  - Procedures for eliminating the discharge through notification, technical assistance, inspections and the compliance strategy required above.
- Comply with requirements to address illicit discharges found or reported within Permitestablished timelines (see S5.C.3.d.iv.).
- Train technical staff that is responsible to conduct these activities.
- Track and maintain records of the activities conducted to meet the requirements of S5.C.3.

# 2.3.2 Existing Programs and Activities

Kelso's activities in this area are ongoing:

- Follows procedures for detection, reporting, characterization, response, investigation, removal, clean-up, and enforcement in the *Municipal Stormwater Illicit Discharge Detection and Elimination (IDDE) Program 2015.*
- Contacts the public to provide education and enforcement when illicit discharges are reported or discovered.
- Provides training on IDDE awareness one time, per Permit term, to Operations field staff and Police.
- Operates the Kelso stormwater hotline.
- Encourages the public to report illicit discharges, spills, or other stormwater-related issues using the online Stormwater Incident Report at <a href="http://www.kelso.gov/stormwater-incident-report">http://www.kelso.gov/stormwater-incident-report</a>.
- Tracks illicit discharge reports and responses.
- Tracks and documents required recordkeeping.

# 2.3.3 Planned Activities

Planned activities for 2019 include:

- Ensure all new field employees are trained in IDDE.
- Continue ongoing activities listed above, including enforcing Kelso Municipal Code (KMC) 13.09.050, responding to illicit discharges and spills, educating the public about the hazards of IDDE through educational enforcement, and providing the public ways to report illicit discharges and spills, including the hotline and an online incident report.
- Map any new public (City-operated) stormwater treatment and flow control facilities constructed in 2019.
- Map discharge points and new catch basins.
- Follow indicator sampling procedures, when required, in response to illicit discharges discovered during field screening.
- Field screen at least 12% of the MS4 by December 31 for non-stormwater discharges and illicit connections.

# 2.4 Controlling Runoff from Development, Redevelopment, and Construction Sites

The City's stormwater regulatory program currently implements standards for temporary erosion control and permanent stormwater control on development, redevelopment, and construction projects greater than 2000 square feet in size.

Note: the Permit includes Section S5.C.4.g for watershed-scale stormwater planning. None of these requirements apply to the City, so they are not listed below.

## 2.4.1 Permit Requirements

Section S5.C.4 requires the following:

- Implement and enforce a program to reduce pollutants in stormwater runoff that enters the MS4 from new development, redevelopment and construction site activities.
- Implement an ordinance with necessary legal authority to require development, redevelopment, and construction applications submitted after June 30, 2017 to control runoff according to the

minimum technical requirements in either the 2014 Ecology Stormwater Management Manual for Western Washington, or an equivalent Manual approved by Ecology.

- Include a permitting process with site plan review, inspection, and enforcement capability to all sites that meet the minimum thresholds in Appendix 1 of the City's Permit, including the following components:
  - o Review all stormwater site plans.
  - Inspect, prior to clearing and construction, all permitted development sites that have high potential for sediment transport.
  - Inspect all permitted development sites during construction to verify proper installation of erosion and sediment controls.
  - Inspect all permitted development sites upon completion of construction, and prior to final approval or occupancy, to ensure proper installation of permanent stormwater facilities. Verify that a maintenance plan is complete and responsibility for maintenance is assigned.
  - An enforcement strategy to respond to issues of non-compliance with above-noted components.
- Notify representatives of proposed new development and redevelopment of the Notice of Intent (NOI) for Construction Activity and the NOI for Industrial Activity.
- Train staff on the new codes, standards, processes and procedures.

# 2.4.2 Existing Programs and Activities

Kelso's activities in this area are ongoing:

- Enforce existing local stormwater and erosion control codes for development, redevelopment, and construction sites that meet stormwater thresholds.
- Enforce stormwater and erosion control regulations using Ecology's 2014 Stormwater Management Manual for Western Washington (SWMMWW) for sites over 2000 square feet that meet thresholds established in Appendix 1.
- Review site plans and grading permit applications that meet the SWMMWW Minimum Requirements.
- Perform site inspections before, during, and after construction on regulated sites.
- Make known the NOIs for Construction Activity and Industrial Activity to developers.
- Continue review of development, redevelopment, and construction sites using thresholds established in Appendix 1 of the 2013 permit.
- Continue inspecting regulated sites before, during, and after construction.
- Document all required recordkeeping.

## 2.4.3 Planned Activities

Planned activities for 2019 include:

• Ensure all Community Development staff are trained on the updated stormwater requirements, provisions and procedures.

# 2.5 Municipal Operations and Maintenance (O&M)

The Operations Department operates the MS4 and City properties, including streets, rights-of-way, parks, and municipal buildings. Employees follow procedures to reduce stormwater impacts from City operations. During the Permit term, the City plans to increase the frequency of catch basin inspections, and implement a catch basin repair and replacement program.

#### 2.5.1 Permit Requirements

Section S5.C.5 requires the following:

- Develop and implement an O&M program with the ultimate goal of preventing or reducing pollutant runoff from municipal operations.
- By June 30, 2017, establish and adopt maintenance standards for components of the municipal separate stormwater system that are at least as protective as those specified in Volume V of the SWMMWW.
- Conduct annual inspections of City-operated stormwater treatment and flow control and treatment BMPs/facilities, and conduct required maintenance within Permit-established deadlines.
- Spot checks of potentially damaged permanent stormwater treatment and flow control BMPs/facilities after major storm events and system-wide inspection if spot checks indicate widespread damage. Then conduct required maintenance within Permit-established deadlines.
- Inspect all City-operated catch basins and inlets at least once by August 1, 2017 and then every two years thereafter.
- Implement practices, policies, and procedures to reduce stormwater impacts associated with runoff from municipal operation and maintenance activities including but not limited to streets, parking lots, roads, highways, buildings, parks, open space and maintenance yards owned or maintained by the City.
- Implement an ongoing training program for staff whose job functions may impact stormwater quality. Document the training program.
- 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.

# 2.5.2 Existing Programs and Activities

Kelso's activities in this area are ongoing:

- Annual inspection of City-operated permanent stormwater treatment and flow control facilities.
- Spot check stormwater facilities and flood-prone areas of the conveyance system after rain storms larger than the 24-hour, 10-year storm event.
- Routine street sweeping.
- Clean ditches and culverts as needed.
- Follow City of Kelso *Municipal Stormwater O&M Program 2015* for operation of stormwater facilities, streets, parks and buildings owned or operated by the City.
- Follow City of Kelso *Nutrient, Integrated Pest Management and Herbicide Plan 2015* to guide the use of nutrients and chemicals on City-operated properties and rights-of-way.
- Follow protocols for spills response on City streets and properties in the City of Kelso *Illicit* Discharge Detection and Elimination (IDDE) Program 2015.

- Train new Operations staff on operational source control BMPs for the maintenance yard, City street and property operations, and City parks operations or when the program is modified.
- Maintain the SWPPP for the Operations maintenance yard; conduct quarterly inspections.
- Document all required recordkeeping.

#### 2.5.3 Planned Activities

Planned activities for 2019 include:

- Implement a catch basin structural repair and replacement program to repair or replace approximately 10 catch basins in 2019.
- Inspect approximately half of City-operated catch basins and maintain those that need it.

## 2.6 NPDES Program Administration

The City's NPDES compliance program requires administration to develop plans and schedules, administer contracts, maintain tracking systems, process payments, and prepare reports.

#### 2.6.1 Planned Activities

Planned activities for 2019 include:

- Submit the 2018 Annual Report and attachments, including the 2019 SWMP.
- Submit the annual Permit fee.
- Submit required payments for regional monitoring activities (see Chapter 3).
- Update the SWMP for 2020 activities in late 2019.
- Maintain records of NPDES activities for each Permit component.

# 3. MONITORING AND ASSESSMENT

# 3.1 Stormwater Monitoring

Stormwater monitoring requirements are given in Section S8 of the Permit. The basic requirements for stormwater monitoring include the following:

- Provide Ecology with any stormwater-related monitoring or studies conducted by or on behalf of the City.
- Study the effectiveness of the SWMP, either through contributing to Ecology's established regional effort or by conducting stormwater discharge monitoring.
- Pay into a collective fund to conduct source identification and diagnostic monitoring, which will implement the Source Identification Information Repository (SIDIR).

#### 3.1.1 Ongoing Activities

• The City has chosen to pay into the regional effort for monitoring. The City will remit payments to Ecology annually through 2019 for effectiveness monitoring and the SIDIR.



# **Engineering Department**

203 S. Pacific Avenue, PO Box 819 Kelso, WA 98626



# MEMO

To:	Department of Ecology
From:	Van McKay, P.E.
Date:	March 19, 2019
Subject:	Description of the City's public education and outreach efforts conducted in 2018 to comply with Phase II Permit sections S5.C.1.a.i and ii

To build general awareness, the City made available to the public the Solution to Pollution brochure that describes the hazards of stormwater pollution and specific habits to reduce stormwater pollution.

As much information is now communicated through the Internet, the City maintained and regularly updated its stormwater website with many documents to educate the public on stormwater pollution and the City's stormwater management program (SWMP). The documents include annual reports, educational documents, stormwater management plans, and stormwater ordinances. It also includes supporting documents for the SWMP such as the IDDE program, the O&M program and the Operations SWPPP. The City's stormwater website is located at: <a href="http://stormwater.kelso.gov">http://stormwater.kelso.gov</a>.

The City provided financial support for Earth Day. The funds were earmarked to help with the Earth Day bag contest. This contest uses art as a vehicle to educate school children on stormwater and water quality issues.

Cowlitz Clean Waters (CCW), that includes permittees and secondary permittees in Cowlitz County, had meetings to further its combined educational efforts. The purpose of CCW is to develop media materials necessary to undertake a regional social marketing strategy and to disseminate these media within the area.

A Recognition Event was held in January for students, family, friends and faculty to honor the student finalists of the 2018 calendar contest. The event included an art exhibition and haiku reading. It was well attended and prizes were given to the finalists. The mayors of Kelso and Longview presented the grand prize to Faith Fowler of Mt. Solo Middle School.

CCW held its second annual "Solutions to Stormwater Pollution" calendar contest where middle school students submitted artwork and haikus and won prizes (calendar submitted with annual report). The City spearheaded the contest and two-thousand five hundred (2,500) 2019 calendars were produced and distributed for free. County-wide distribution included school districts, middle schools, permittee front counters, libraries and other locations.



# **Engineering Department**

203 S. Pacific Avenue, PO Box 819 Kelso, WA 98626



CCW developed and hosted its first annual "Solutions to Stormwater Pollution" video contest for regional high school students and Kelso spearheaded this effort. Students submitted 30-second public service announcement videos on promoting behavior change to address stormwater pollution. Prizes were awarded to four student teams.

The Healthy Water Habits poster design was completed after a multi-year effort and 2,500 posters were printed (poster submitted with annual report). The poster has a regional appearance and shows tips on seven different topics for behavior changes to protect our local waters. The posters are and will be given away at permittee front counters, events such as the Earth Day Celebration and other locations.

CCW has been designing a series of refrigerator magnets on stormwater pollution and behavior changes as well as dog waste signs for pet waste stations and city parks.

Van McKay gave a speech on stormwater pollution and civil engineering to two Kelso High School classes on college readiness.

#### S5.C.3.e (IDDE Log)

Date In	<u>l</u> nspection, <u>C</u> aller, or <u>H</u> otline	<u>S</u> pill, Illicit <u>D</u> umpn/Dischrg or <u>C</u> onnection, or <u>PR</u> Feedback	Caller Information	Location	Problem	Response Date	Discussion of Actions and Resolution (Van McKay unless otherwise noted)	Date Completed	Days to Respond	Days to Conclude
1/18/2018	I	D		201 Allen St.	Yuriy Nyukeyev, owner of Atech Services, was observed pouring a fluid with pollutant(s) down the catch basin in front of their business	1/18/2018	I spoke with Yuriy about illicit discharges to the catch basin, where the cb waters go, and that what he did was an illicit discharge. I gave him a copy ol the stormwater management ordinance and explained key illicit discharge sections that were highlighted. He thought the water was treated and was unaware of illicit discharge regulations. He said he would discontinue the practice and would pour these fluids down the sewer drain.	1/18/2018	0	0
2/1/2018	С	D		1000 and 1002 S. 13th Ave.	Motor oil spill on the properties and on S. 13th Avenue and Grade Street to the bridge.	2/1/2018	I spoke with Jessica Wright, 360-425-2360, manager of the Dairy Queen (1002 S. 13th) and discussed my findings on the oil spill. It looked like a significant origin was at an upstream parking stall to the south. I spoke of the illicit discharge, the City's illicit discharge ordinance of which I gave her a copy and the motor oil's eventual discharge to the Coweeman River and environmental effects. We discussed the company's responsibilities and she was going to contact Cowlitz Clean Sweep for a cleanup. I also spoke with Andrea Gebhardt, 360-501-7306, manager of Heritage Bank (1000 S. 13th Ave.) about similar topics but did not have an ordinance to give. She said she would contact her supervisors, Jessica, and would share in the responsibility of CCS. I took photos of the spill and Operations had placed oil pads and booms at nearby catch basins. Cowlitz Clean Sweep mas hired by Dairy Queen and responded with hand-applied liquid degreaser and a sweeper/vacuum truck. They were satisfactorily cleaning up the spill.	2/1/2018	0	0
6/20/2018	С	D		721 Ash Street	Renter Paul Haggeman dumped lawn clippings into the gutter	6/20/2018	Mike Meier responded and let the renter know that he had to get the lawn clippings out of the gutter. I responsed on 6-21-2018 and spoke with Mr. Haggeman (sp?). A portion of the yard debris was removed from the gutter and I took photos. I explained the impacts of yard debris on the stormwater system/Coweeman River and gave him a copy of the stormwater management ordinance. I let him know that he should remove the lawn clippings by tomorrow. I inspected the site 6-25-2018 and the yard debris was removed from the gutter and stockpiled in the yard.	6/25/2018	0	5
7/11/2018	I	D	•	307 SW 6th Ave.	Water being discharged to adjacent apartment property to west.	7/11/2018	M. Meier received a call from a representative of the apartment complex at 306 SW 7th Ave. about water being discharged onto the apartment parcel from 307 SW 6th Ave. We visited the site and saw no discharge. At 307 SW 6th work had been performed on a garage building. A gutter with downspout discharged subsurface. 07-16-2018: M. Meier said the owner of the property told him that the downspout was changed from discharging to the street to subsurface infiltration with a rock pit.	7/16/2018	0	5
7/16/2018	С	D	REDACTED	2205 Bloyd	Water discharged to street, likely from a swimming pool at the residence	7/16/2018	No one answered the door at 2205 Bloyd at 1:30. Photos were taken of water discharging through a curb drain to the gutter. Water was evaporating before it reached the nearest catch basin. Owner of the parcel shows as Denise Brady. 7-17-2018: Mr. Hill, Citiy councilman, called again and said the water was discharging from the property at a higher rate. 9:00 am I went to the property and spoke with Denise Brady (see photos). The discharge, about a garden hose at 1/4 rate, was flowing 1-1/2 blocks almost to the first catch basin. She has a pool in the back yard that she knew was leaking. She filled it two days ago and it was about 1/3 full and leaking. The water went underground next to a downspout concrete receiving pipe and I am reasonably sure it is conveyed through the stormwater management ordinance. As she has "no money" to treat the water before discharge or to pay someone to find the leak, I told her she should let the pool drain and not fill it again.	7/17/2018	0	1

#### S5.C.3.e (IDDE Log)

Date In	<u>l</u> nspection, <u>C</u> aller, or <u>H</u> otline	<u>S</u> pill, Illicit <u>D</u> umpn/Dischrg or <u>C</u> onnection, or <u>PR</u> Feedback	Caller Information	Location	Problem	Response Date	Discussion of Actions and Resolution (Van McKay unless otherwise noted)	Date Completed	Days to Respond	Days to Conclude
8/1/2018	С	D		2205 Bloyd	Water discharged to street, likely from a swimming pool at the residence	8/1/2018	M. Kardas had been contacted by Jim Hil to re-investigate the illicit discharge as it was occuring again. Water was being discharged to the street from the same curb drain and photos were taken. On site, Mr. Hill said that it had been discharging to the street for several days and several local residents were concerned about it. Mike Meier, Code Enforcement, joined me and we spoke with Denise Hoffman. Her name on her driver's license was Hoffman, not Brady. She claimed that her son tried but failed twice to fix the leak in the pool and now she was draining it. She claimed that she had not put more water in the pool and that she would remove the pool after it was drained. She did not indicate that water was treatted for chlorine but said there was none in it. Although water was being discharged from the curb drain, a black garden hose was hooked up to the side bottom of the pool and was discharging to the front lawn. M. Meier did not cite D. Brady for an illicit discharge. 8-2-1018: A letter was drafted and sent to D. Hoffman on future discharges and risk of citation/fine.	8/2/2018	0	1
8/17/2018	С	D		106 N. Minor Rd. Motel 6	Employee dumping pollutants into a catch basijn	8/17/2018	Received an email from Ecology today with an ERTS #683396 report. A citizen observed an employee dumping a pollutant, maybe old laundry detergent, into a catch basin a few days ago. I observed 3 catch basins on the property and one adjacent on Minor Road. I spoke with the on-duty manager Michelle Mace. We discussed the issue and she did not know of this occuring. I explained the City's code regarding illicit discharges and increasing enforcement and gave her a copy of the stormwater management code. She said she would let employees know about illicit discharges. She would also explain the situation and give the code to the owner, Nick Patel of Kelso 6 LLC.	8/17/2018	0	0

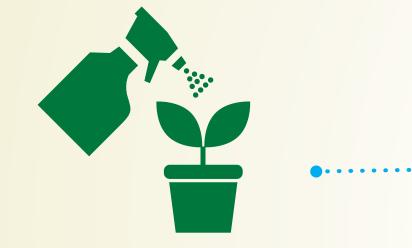


**Clean Waters** 



# **Put Trash in its Place**

**Don't be a litterbug - keep your neighborhood clean! Dispose of trash and litter where they belong. Even better, try to recycle or repurpose!** 



# A Little Goes a Long Way

Use fertilizers and pesticides only when necessary and no more than the recommended amounts. Never apply when rain is forecast. Better yet, consider using natural pest control methods.

# Healthy Water Habits **Protect our local waters** by following these

simple tips



# **Scoop the Poop**

Always clean up after your dog or cat! Scoop and bag pet waste and dispose in the trash.



# **Don't Drip and Drive**

Check your car to make sure it's not leaking! Never dump vehicle fluids into a storm drain or drainage ditch. Always recycle or properly dispose of used motor oil and other vehicle fluids.

# **Don't Blow It**

Never rake or blow leaves and grass clippings into the street or drainage ditch. **Collect yard waste and either compost or** bag for proper disposal.



# **Spread the Word**

Tell your family, friends and neighbors how they can be a solution to stormwater pollution by following these tips! When each of us does our small part, it adds up to clean and healthy rivers, lakes and streams for Cowlitz County!



# **Keep your Vehicle Clean and Green**

Wash your car or truck on the lawn or gravel and use non-toxic, biodegradable cleaning products. An even greener idea is to take your vehicle to a commercial car wash that recycles water!

# www.cowlitzcleanwaters.org





# **Solutions to Stormwater Pollution**

# POLLUTION CALENDAR TO STORMWATER THE 2019 SOLUTIONS TO STORMWATER

Cowlitz Clean Waters is proud to present the winners from its second annual calendar contest to promote awareness of stormwater pollution and the ways that we can help keep our local waters clean, fishable and swimmable. To help convey the message of to create artwork or write a haiku depicting stormwater pollution topics while sharing their artistic talent and passion for the environment. The 2019 Solutions to Stormwater Pollution calendar focuses on solutions to stormwater pollution and ways people can change behaviors to improve water quality and the environment in our community. We thank all these middle-schoolers for their stellar work!



Clean Waters

Washington

MAIVO

# **ABOUT COWLITZ CLEAN WATERS**

WASHINGTON STATE UNIVERSITY

CREATING THE FUTURE TODAY

LONGVIEW

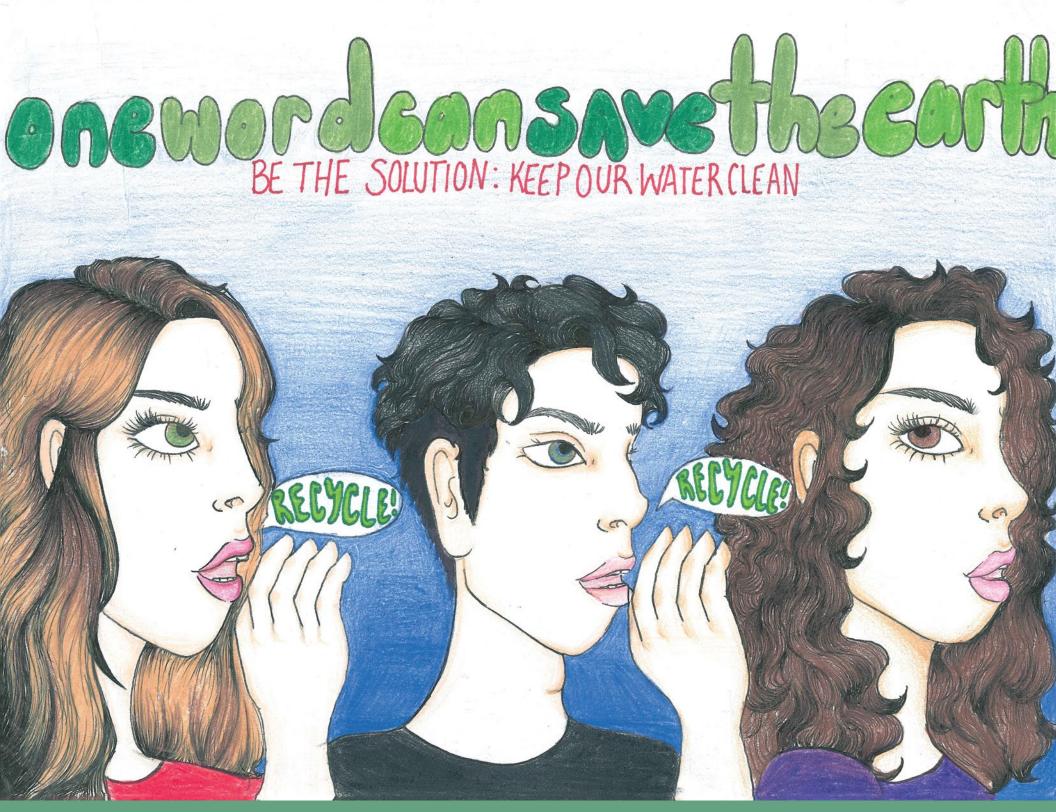
Cowlitz Clean Waters is a collaborative initiative of the City of Kelso, City of Longview, Cowlitz County, Consolidated Diking Improvement District #1 (CDID#1), Kelso School District, Longview School District, Washington State University (WSU) Cowlitz County Extension and Lower Columbia College. This partnership is committed to developing a public information and education campaign to help inform the Lower Columbia region about the impacts of stormwater runoff on our local waterways and to affect behavior changes and water quality improvements in our communities.





Pro.ersistewnesioztiiwoo.www

# 2019 CALENDAR Burger Status How You Can Prevent Stormwater Pollution



**TIP** Tell others how they can help protect our lakes and rivers by following the behavior change tips shown in each month of this calendar. **Promoting the reduction of stormwater pollution benefits** individuals, communities and the environment.

# TOPIC Spread the Word

# **JANUARY 2019**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
DECEMBER 2018           S         M         T         W         T         F         S           1         2         3         4         5         6         7         8           9         10         11         12         13         14         15           16         17         18         19         20         21         22           23         24         25         26         27         28         29           30         31	FEBRUARY 2019           S         M         T         W         T         F         S           3         4         5         6         7         8         9           10         11         12         13         14         15         16           17         18         19         20         21         22         23           24         25         26         27         28	1 New Year's Day	2	3	4	5
6	7	8	9	10	11	12

13	14	15	16	17	18	19
20	21	22	23	24	25	26
	Martin Luther King Day					
27	28	29	30	31	1	2
	Martin Luther King Day				<b>25</b>	

Artwork: Brooke Whitbeck, Mt. Solo M.S. 8th Grade - Pencil, Colored Pencil, Ink

Haiku: Adryan Reid, Mt. Solo M.S. 7th Grade



Water gets healthy, Fish get healthy and happy, And life is sunny.



**TIP** Keep a litter bag in your car for trash to help keep your car and the landscape clean.

**FACTOID** 

Litter discarded over the urban landscape ends up in the stormwater drainage system causing localized flooding problems.

# TOPIC Put Waste in its Place

# **FEBRUARY 2019**

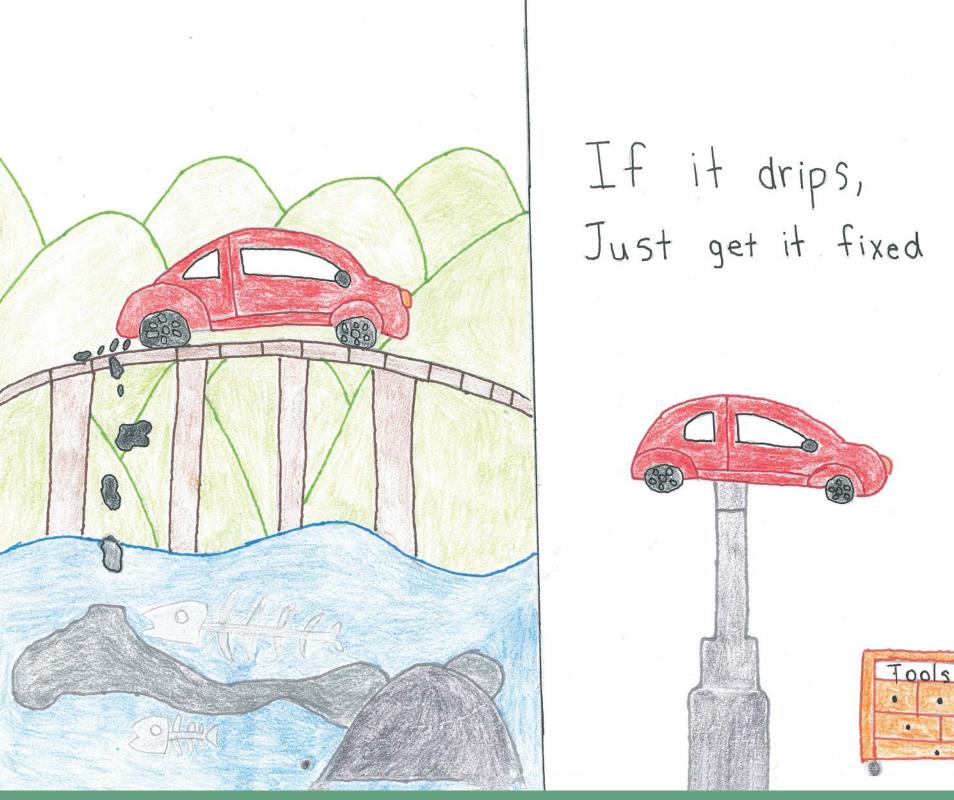
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
JANUARY 2019           S         M         T         W         T         F         S           1         2         3         4         5           6         7         8         9         10         11         12           13         14         15         16         17         18         19           20         21         22         23         24         25         26           27         28         29         30         31         14	MARCH 2019           S         M         T         W         T         F         S           3         4         5         6         7         8         9           10         11         12         13         14         15         16           17         18         19         20         21         22         23           24         25         26         27         28         29         30	29	30	31	1	2
3	4	5	6	7	8	9

10	11	12	13	14	15	16
				Valentine's Day		
17	18	19	20	21	22	23
	President's Day					
24	25	26	27	28	1	2

Artwork: James McDonald, Mt. Solo M.S. 8th Grade - Pencil, Colored Pencil, Ink

Haiku: Ben Ross, St. Rose School 7th Grade Cowlitz Clean Waters

Storm drains wash down Waste Fish are choking and dying We need to stop this



If you find a leak from your vehicle, fix it right away. If the leak is on your driveway, you can easily soak it up with kitty litter, sweep it up and dispose in the garbage. **V FACTOID** Oils and other toxic vehicle fluids mix with stormwater and ends up in our waterways and lakes. Oil coats fish gills and makes it difficult or impossible for them to breathe.

# **MARCH 2019**

# TOPIC Don't Drip & Drive

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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
FEBRUARY VUISION           S         M         T         W         T         F         S           3         4         5         6         7         8         9           10         11         12         13         14         15         16           17         18         19         20         21         22         23           24         25         26         27         28         24	S IM         T         V	26	27	28	1	2
3	4	5	6	7	8	9

10	11	12	13	14	15	16
Daylight Saving Time Begins						
17	18	19	20	21	22	23
St. Patrick's Day					World Water Day	
24	25	26	27	28	29	30
31						

Artwork: Alizabeth Chavez, Mt. Solo M.S. 7th Grade - Colored Pencils, Ink

Haiku: Tyler Staggs, Mt. Solo M.S. 7th Grade Cowlitz Clean Waters

As oil goes down drains, It will take a while to clean, For fish belly up.



Throw your litter in the trash can or recycling bin, not the street and never into the storm drain. Dispose of all trash properly, every time.

The benefits of less litter are reduced pollutants in waterways, more fishable and swimmable rivers and lakes, and a better looking community.

# **APRIL 2019**

# TOPIC Put Waste in its Place

FACTOID

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
MARCH         2019           S         M         T         W         T         F         S           3         4         5         6         7         8         9           10         11         12         13         14         15         16           17         18         19         20         21         22         23           24         25         26         27         28         29         30	1	2	3	4	5	6
7	8	9	10	11	12	13

14	15	16	17	18	19	20
21	22	23	24	25	26	27
Easter	Earth Day				National Arbor Day	
28	29	30	1	2	3	MAY 2019           S         M         T         W         T         F         S           1         2         3         4         5         6         7         8         9         10         11           12         13         14         15         16         17         18           19         20         21         22         23         24         25           26         27         28         29         30         31

Artwork: Charlize Blain, Mt. Solo M.S. 7th Grade - Colored Pencils, Ink

Haiku: Danika Godwin, Mt. Solo M.S. 7th Grade Cowlitz Clean Waters

Why would you throw it When you could hurt the Ocean So please dispose it



**FACTOID** 

Promptly scoop pet waste and put it in the garbage or down the toilet where it will be properly treated. Picking up after your dog is one of the many small actions that will help keep our waters clean.

Just one gram of dog waste can contain as many as 23 million fecal coliform bacteria, which can spread salmonella and giardia.

# MAY 2019

		TOPIC
Scoop	the	Poop

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Image: Second system         Image: Se	JUNE 2019           S         M         T         W         T         F         S           1         2         3         4         5         6         7         8           9         10         11         12         13         14         15           16         17         18         19         20         21         22           23         24         25         26         27         28         29           30	30	1	2	3	4
5	6	7	8	9	10	11

12	13	14	15	16	17	18
Mother's Day						
19	20	21	22	23	24	25
26	27	28	29	30	31	1
	Memorial Day					

Artwork: Chloe McFarland, Mt. Solo M.S. 6th Grade - Pencil, Colored Pencils

Haiku: Jacob Kamas, Castle Rock M.S. 8th Grade Cowlitz Clean Waters

Most people want Dew Just maybe not your doo dude Pick up your doo dude



Always put your cigarette butts in ashtrays, not on the ground. Remember - our parks, playgrounds and riverbanks are not ashtrays. "Hold on to your butts" and help keep these places clean.

The overall littering rate for cigarette butts is 65%. Although cigarette butts may be small, the cummulative amount of their litter has a big effect.

# TOPIC ARTWORK Put Waste in its Place

# **JUNE 2019**

# TOPIC HAIKU Don't Blow It

FACTOID

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Image: Im	S JULY 2019           S         M         T         W         T         F         S           1         2         3         4         5         6           7         8         9         10         11         12         13           14         15         16         17         18         19         20           21         22         23         24         25         26         27           28         29         30         31         31         33	28	29	30	31	1
2	3	4	5	6	7	8

15
22
29
_

Artwork: Annie Percival, Mt. Solo M.S. 8th Grade - Watercolors, Ink

Haiku: Virginia Carrion, St. Rose School 7th Grade Cowlitz Clean Waters

*Trudging through a pipe Residue from tiring work Clogging up the drain.* 

# keep our Waters clean!

#### **FACTOID**

**Don't Drip & Drive** 

TOPIC

Used motor oil is the largest single source of oil pollution in our lakes, streams and rivers. Americans spill 180 million gallons of used oil each year into our waters - 16 times the amount spilled by the Exxon Valdez in Alaska.

# **JULY 2019**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
JUNE 2019           S         M         T         W         T         F         S           2         3         4         5         6         7         8           9         10         11         12         13         14         15           16         17         18         19         20         21         22           23         24         25         26         27         28         29           30	1	2	3	<b>4</b> Independence Day	5	6
7	8	9	10	11	12	13

Oil and WAter

Don't

MIX

Use ground cloths or drip pans beneath your parked vehicle if you have leaks or when you are doing maintenance work. If you spill vehicle fluids, clean it up immediately.

14	15	16	17	18	19	20	-
21	22	23	24	25	26	27	
28	29	30	31	1	2	AUGUST 2019 S M T W T F S 1 2 3 4 5 6 7 8 9 10	
						11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	

Artwork: Gisle Sanchez, Mt. Solo M.S. 8th Grade - Colored Pencils, Ink

Haiku: Charlize Blain, Mt. Solo M.S. 7th Grade Cowlitz Clean Waters

*Water was <u>once clean</u>, Now, corrupted by <u>all oils.</u> Please; HELP THE WATER.* 



Instead of washing your car on the driveway or in the street where the washwater will enter the stormwater drainage system, wash it on the lawn or at a car wash.

Outdoor car washing results in large amounts of oil, grime and automotive chemicals flowing into the storm drains and into our waterways.

# **TOPIC ARTWORK**

# Keep your Vehicle Clean & Green AUGUST 2019

# **TOPIC HAIKU Scoop the Poop**

FACTOID

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
JULY 2019           S         M         T         W         T         F         S           1         2         3         4         5         6           7         8         9         10         11         12         13           14         15         16         17         18         19         20           21         22         23         24         25         26         27           28         29         30         31	SEPTENBER 2019           S         M         T         W         T         F         S           1         2         3         4         5         6         7           8         9         10         11         12         13         14           15         16         17         18         19         20         21           22         23         24         25         26         27         28           29         30	30	31	1	2	3
4	5	6	7	8	9	10

11	12	13	14	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28	29	30	31	

Artwork: Rosie Johnson, Cascade M.S **7th Grade - Colored Pencils** 

Haiku: Emma Sandberg, Home School **6th Grade** 

Cowlitz **Clean Waters** 

Why step in pet poop Instead clean all of it up, Scoop it, and bag it.



#### **FACTOID**

Dumping yard debris in the street can lead to clogged storm drains and pipes, as well as pollution to lakes and streams. Bag or compost yard debris instead.

As yard debris decomposes in stormwater, oxygen is removed from the water. Less dissolved oxygen in the rivers and lakes starves fish and other aquatic animals.

# **SEPTEMBER 2019**

# TOPIC Don't Blow It

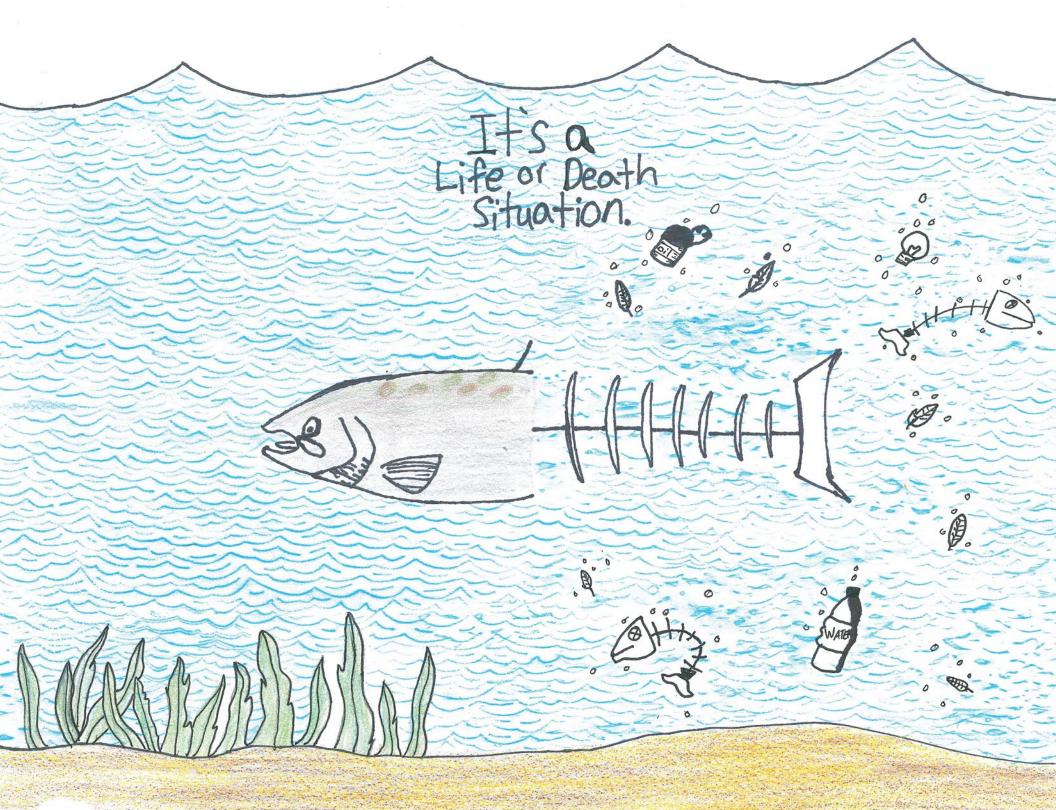
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
	Labor Day					
8	9	10	11	12	13	14

15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	AUGUST 2019           S         M         T         W         T         F         S           1         2         3         1         2         3           4         5         6         7         8         9         10           11         12         13         14         15         16         17           18         19         20         21         22         24         24           25         26         27         28         29         30         31	OCTOBER         2019           S         M         T         W         T         F         S           1         2         3         4         5           6         7         8         9         10         11         12           13         14         15         16         17         18         19           20         21         22         24         25         26           27         28         29         30         31

Artwork: Angel Ahner, Castle Rock M.S. 8th Grade - Colored Pencils

Haiku: Joshua Sandberg, Home School 8th Grade Cowlitz Clean Waters

No leaves in the drain. Please don't leave it. Compost it. Rake and bag all leaves.



Reduce, Reuse and Recycle materials whenever possible. By following the "Three R's," you will be creating less waste that could end up on our streets and contribute to further stormwater pollution.

**FACTOID** 

Litter discourages economic development because it impacts property values. Litter reduces property values by a little over 7% because it sends a message that the community no longer takes pride in its appearance.

# **OCTOBER 2019**

# TOPIC Put Waste in its Place

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
SEPTEMBER 2019           S         M         T         F         S           1         2         3         4         5         6         7           8         9         10         11         12         13         14           15         16         17         18         19         20         21           22         23         24         25         26         27         28           29         30	NOVENERREVENER           S         M         T         W         T         F         S           3         4         5         6         7         8         9           10         11         12         13         14         15         16           17         18         19         20         21         22         23           24         25         26         27         28         29         30	1	2	3	4	5
6	7	8	9	10	11	12

13	14	15	16	17	18	19
	Columbus Dou					
	Columbus Day					
20	21	22	23	24	25	26
27	28	29	30	31	1	2
21	20	25	50	51		
				Halloween		

Artwork: Langston Bartell, Mt. Solo M.S. 8th Grade - Colored Pencils, Ink

**Cowlitz Clean Waters** 



Install a rain garden on your property to absorb and filter stormwater runoff from roof tops, driveways, patios and other hard surfaces.

#### **FACTOID**

Rain gardens can enhance the landscaping and appearance of homes and yards. They also provide habitat for beneficial insects and birds. Find a rain garden handbook at https://extension.wsu.edu/raingarden/homeowner-resources

# TOPIC Spread the Word

# **NOVEMBER 2019**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
S         M         T         W         T         F         S           1         2         3         4         5           6         7         8         9         10         11         12           13         14         15         16         17         18         19           20         21         22         23         24         25         26           27         28         29         30         31         14	DECEMBER 2019           S         M         T         W         T         F         S           1         2         3         4         5         6         7           8         9         10         11         12         13         14           15         16         17         18         19         20         21           22         23         24         25         26         27         28           29         30         31	29	30	31	1	2
<b>3</b> Daylight Saving Time Ends	4	5 Election Day	6	7	8	9
10	11 Veterans Day	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28 Thanksgiving	29	30

Artwork: Lily Mattison, Mt. Solo M.S. 7th Grade - Watercolors, pencil

Haiku: Crystal McCulley, Woodland M.S. 7th Grade Cowlitz Clean Waters

FOR GLOBAL PLEASURE MAINTAIN OUR DELICATE WORLD PROPAGATE THE WORD



Make a resolution not to litter - and keep it! Always put your trash in a proper container. If one is not available, hold on to your trash until you find one. **FACTOID** Litter provides a breeding ground for disease-carrying rats and insects, and can be harmful or fatal to birds, fish and other wildlife.

## GRAND PRIZE WINNER Artwork

# **DECEMBER 2019**

# TOPIC Put Waste in its Place

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2	3	4	5	6	7
9	10	11	12	13	14
		2 3	2 3 4	2 3 4 5	2 3 4 5 6

15	16	17	18	19	20	21
22	23	24	25	26	27	28
	23	27	23	20	21	20
			Christmas			
29	30	31	1	2	NOVEMBER 2019	JANUARY 2020
20		0.		-	SMTWTFS 12	SMTWTFS 1234
					3 4 5 6 7 8 9	5 6 7 8 9 10 11
					10 11 12 13 14 15 16 17 18 19 20 21 22 23	12 13 14 15 16 17 18 19 20 21 22 23 24 25
					24 25 26 27 28 29 30	26 27 28 29 30 31
		New Year's Eve	New Year's Day			

Artwork: Paris Vath, Mt. Solo M.S. 8th Grade - Watercolors, pencil

Haiku: Jeremiah Sandberg, Home School 7th Grade



No trash down the drain Don't litter. It kills the fish Throw trash in garbage





**NOTES:**