

2016 Annual Report Questions for the Western Washington Phase II Municipal Stormwater Permit

The Western Washington Phase II Municipal Stormwater permit (NPDES permit) requires all Permittees to submit annual reports describing the progress of their permit implementation activities. Annual reports cover the previous calendar year's activities, unless otherwise specified, and must be signed by the responsible official and submitted to Ecology by March 31 each year. The Annual Report consists of 67 questions and requires the preparation of several supporting documents. The Annual Report must be submitted online through Ecology's [WQWebPortal](#) service.

Category	#	Question	Comment
General Obligations	1	Attach updated annual Stormwater Management Program Plan (SWMP Plan). (S5.A.2)	See Attachment 1
General Obligations	2	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
General Obligations	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
General Obligations	4	Coordinated among departments within the jurisdiction to eliminate barriers to permit compliance. (S5.A.5.b)	Yes
Public Outreach	5	Attach description of public education and outreach efforts conducted per S5.C.1.a.i and ii.	See Attachment 2
Public Outreach	6	Created stewardship opportunities (or partnered with others) to encourage resident participation in activities such as those described in S5.C.1.b.	Yes
Public Outreach	7	Used results of measuring the understanding and adoption of targeted behaviors among at least one audience in at least one subject area to direct education and outreach resources and evaluate changes in adoption of targeted behaviors. (Required no later than February 2, 2016, S5.C.1.b)	Not Applicable. Due in 2017 Annual Report.
Public Outreach	7b	Attach description of how this requirement was met.	Not Applicable
Public Outreach	8	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)	Opportunities for public participation and comment involving the Stormwater Management Program (SWMP) are available at the Land Use and Transportation Committee and City Council meetings when the SWMP and Annual Report are reviewed. Comments are also encouraged on the City website.

Public Outreach	9	Posted the updated SWMP Plan and latest annual report on your website no later than May 31. (S5.C.2.b)	Yes
Public Outreach	9b	List the website address.	http://www.cityoffederalway.com/index.aspx?nid=186
IDDE	10	Maintained a map of the MS4 including the requirements listed in S5.C.3.a.i.-vi.	Yes
IDDE	11	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
IDDE	12	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)	Not Applicable
IDDE	12 b	Cite the Prohibited Discharges code reference	Not Applicable
IDDE	13	Implemented procedures for conducting illicit discharge investigations in accordance with S5.C.3.c.i.	Yes
IDDE	13 b	Cite methodology	<i>The City utilizes the Federal Way Illicit Discharge Detection and Elimination Field Procedures and Response Plan which references the following two guidance documents: Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, and the Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual, King County, Herrera.</i>
IDDE	14	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)	59%
IDDE	15	List the hotline telephone number for public reporting of spills and other illicit discharges. (S5.C.3.c.ii)	1-253-835-2700 or after hours at 1-800-400-0749
IDDE	15 b	Number of hotline calls received.	6
IDDE	16	Implemented an ongoing illicit discharge training program for all municipal field staff per S5.C.3.c.iii.	Yes

IDDE	17	Informed public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste. (S5.C.3.c.iv)	Yes
IDDE	17 b	Describe the information sharing actions. (S5.C.3.c.iv)	SWM utilizes its Public Education and Outreach Program to inform staff, residents, and businesses about hazards associated with illicit discharges. Examples of outreach methods used include: newsletters, staff training, public workshops, business inspections, mailings, and participation in regional campaigns.
IDDE	18	Implemented an ongoing program to characterize, trace, and eliminate illicit discharges into the MS4 per S5.C.3.d.	Yes
IDDE	19	Number of illicit discharges, including illicit connections, eliminated during the reporting year. (S5.C.3.d.iv)	29
IDDE	20	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	See Attachment 3
IDDE	21	Municipal illicit discharge detection staff are trained to conduct illicit discharge detection and elimination activities as described in S5.C.3.e.	Yes
Runoff Controls	22	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
Runoff Controls	24	Number of exceptions granted to the minimum requirements in Appendix 1. (S5.C.4.a.i., and Section 6 of Appendix 1)	0
Runoff Controls	25	Number of variances granted to the minimum requirements in Appendix 1. (S5.C.4.a.i., and Section 6 of Appendix 1)	0
Runoff Controls	26	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
Runoff Controls	26 b	Number of site plans reviewed during the reporting period.	226
Runoff Controls	27	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	Yes

		alternatively, inspected all construction sites meeting the minimum thresholds adopted pursuant to S5.C.4.a.i. (S5.C.4.b.ii)	
Runoff Controls	27 b	Number of construction sites inspected per S5.C.4.b.ii.	16
Runoff Controls	28	Inspected permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. (S5.C.4.b.iii)	Yes
Runoff Controls	28 b	Number of construction sites inspected per S5.C.4.b.iii.	26
Runoff Controls	29	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
Runoff Controls	30	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
Runoff Controls	31	Achieved at least 80% of scheduled construction-related inspections. (S5.C.4.b.ii-iv)	Yes
Runoff Controls	32	Verified a maintenance plan is completed and responsibility for maintenance is assigned for projects. (S5.C.4.b.iv)	Yes
Runoff Controls	33	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
Runoff Controls	35	Annually inspected stormwater treatment and flow control BMPs/facilities per S5.C.4.c.iii.	Yes
Runoff Controls	35 b	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.4.c.iii	Not Applicable
Runoff Controls	36	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.	Yes
Runoff Controls	37	Achieved at least 80% of scheduled inspections to verify adequate long-term O&M. (S5.C.4.c.v)	Yes

Runoff Controls	38	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
Runoff Controls	38 b	Attach documentation of any maintenance delays. (S5.C.4.c.vi)	Not Applicable
Runoff Controls	39	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
Runoff Controls	40	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
Runoff Controls	42	Participated and cooperated with the watershed-scale stormwater planning process led by a Phase I county. (S5.C.4.g)	Not Applicable
O & M	43	Implemented maintenance standards as protective, or more protective, of facility function as those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington.	Yes
O & M	44	Applied a maintenance standard that is not specified in the Stormwater Management Manual for Western Washington.	N
O & M	44 b	Please note what kinds of facilities are covered by this alternative maintenance standard. (S5.C.5.a)	Not Applicable
O & M	45	Performed timely maintenance per S5.C.5.a.ii.	Yes
O & M	46	Annually inspected all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities. (S5.C.5.b)	Yes
O & M	46 b	Number of known municipally owned or operated stormwater treatment and flow control BMPs/facilities. (S5.C.5.b)	431
O & M	46c	Number of facilities inspected during the reporting period. (S5.C.5.b)	273
O & M	46 d	Number of facilities for which maintenance was performed during the reporting period. (S5.C.5.b)	273
O & M	47	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.5.b.	Not Applicable

O & M	48	Conducted spot checks and inspections (if necessary) of potentially damaged stormwater facilities after major storms as per S5.C.5.c.	Yes
O & M	49	Inspected all municipally owned or operated catch basins and inlets as per S5.C.5.d, or used an alternative approach. (Required once no later than August 1, 2017 and every two years thereafter, except once no later than June 30, 2018 and every two years thereafter for the City of Aberdeen)	Yes
O & M	49b	Number of known catch basins.	12,297
O & M	49c	Number of catch basins inspected during the reporting period.	4,374
O & M	49d	Number of catch basins cleaned during the reporting period.	2,774
O & M	50	Attach documentation of alternative catch basin cleaning approach, if used. (S5.C.5.d.i or ii)	Not Applicable
O & M	51	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
O & M	52	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
O & M	53	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
TMDL	54	Complied with the Total Maximum Daily Load (TMDL)-specific requirements identified in Appendix 2. (S7.A)	Not Applicable
TMDL	55	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
Monitoring	56	Attach a description of any stormwater monitoring or stormwater-related studies as described in S8.A.	See Attachment 4
Monitoring	57	Participated in cost-sharing for the regional stormwater monitoring program (RSMP) for status and trends monitoring. (S8.B.1)	Yes

Monitoring	57 B	If choosing to conduct individual status and trends monitoring, attach an annual stormwater monitoring report in accordance with S8.B.2. (Required to submit reports beginning March 31, 2016)	Not Applicable
Monitoring	58	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
Monitoring	58 b	If choosing to conduct discharge monitoring, attach an annual stormwater monitoring report in accordance with S8.C.2 and Appendix 9. (Required to submit reports beginning March 31, 2016)	Not Applicable
Monitoring	59	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
Monitoring	60	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)	Yes
General Obligations	61	Number of G3 notifications provided to Ecology.	1
General Obligations	62	Took appropriate action to correct or minimize the threat to human health, welfare, and/or the environment per G3.A.	Yes
General Obligations	63	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)	Yes
General Obligations	64	If requested, submitted an Adaptive Management Response report in accordance with S4.F.3.a.	Not Applicable
General Obligations	65	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
General Obligations	66	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
General Obligations	67	Number of non-compliance notifications (G20) provided in reporting year.	0
General Obligations	67 b	List the permit conditions described in non-compliance notification(s).	Not Applicable

Attachment 1 - Stormwater Management Program (SWMP) Update

Background

The National Pollutant Discharge Elimination System (NPDES) permit program is a requirement of the Federal Clean Water Act, which is intended to protect and restore waters for “fishable and swimmable” uses. The Federal Environmental Protection Agency has delegated permit authority to state environmental agencies. In Washington, the NPDES-delegated permit authority is the Washington State Department of Ecology. Since Federal Way operates a small municipal storm sewer system that serves less than 100,000 people, it is designated as a Phase II community and must comply with Ecology’s Western Washington Phase II NPDES Municipal Stormwater Permit.

The Permit allows municipalities to discharge stormwater runoff from municipal drainage systems into the State’s water bodies (i.e., streams, rivers, lakes, wetlands, etc.) as long as municipalities implement programs to protect water quality to the “maximum extent practicable” through application of Best Management Practices. These required practices, specified in the Permit, are collectively referred to as the Stormwater Management Program (SWMP).

The Permit requires the City to report annually by March 31st of each year on program implementation for the prior year and requires municipalities to update the SWMP to describe the actions planned to achieve and maintain permit compliance in the upcoming year. The remainder of this document is intended to meet this requirement and describes the actions the City of Federal Way has planned to meet the 2016 permit requirements. The SWMP update is organized according to the following program components:

- Public Education and Outreach
- Public Involvement
- Illicit Discharge Detection and Elimination
- Runoff Controls
- Pollution Prevention and Municipal Operations and Maintenance
- Monitoring

Permit Implementation Assistance Grant

Ecology provides assistance to NPDES Stormwater Municipal Permittees through a biennial Capacity Grant program. Stormwater Capacity Grants are non-competitive grants that are awarded directly to each municipality. Through this program, the City of Federal Way received \$50,000 to provide funding for activities, technical resources, and equipment that will help implement the requirements of the NPDES permit in 2016 and 2017.

Phase II NPDES Permit Audits

Beginning in 2016, Ecology is beginning a Municipal Stormwater Permit Audit Program to evaluate Phase II Permittees’ compliance with the permit requirements. Ecology will randomly select four municipalities to be audited each year with a goal to audit every jurisdiction every 5-7 years. Federal Way was not chosen for an audit in 2016 however, staff will work on organizing permit related documentation, staff training, and proper implementation of policies and procedures in anticipation of a possible audit next year.

Section 1 – Planned Public Education and Outreach Activities

The Surface Water Management Division (SWM) implements an on-going public education and outreach program designed to reduce and eliminate behaviors and practices that cause or contribute to adverse

stormwater impacts. The program utilizes a variety of approaches to inform targeted audiences about stormwater issues and provides specific actions people can follow to minimize stormwater pollution. A summary of the major public education activities planned for 2016 is provided below:

- Expansion of the Storming the Sound with Salmon (SSS) program- The SSS stormwater education program is currently implemented in 26 elementary, middle, and high schools in the Federal Way Public School District. The program provides students with the opportunity to raise salmon in their school while learning about real life stormwater issues in the classroom. The program also provides students with outdoor learning experiences, including a salmon release field trip each spring. SWM was awarded a King County WaterWorks grant in the amount of \$104,500 to expand SSS to the remaining eleven schools that are currently not participating in the program. The grant will also be used to develop new curriculum on Low Impact Development that will integrate LID demonstration features at the City's Town Square Park.
- Salmon Release Events- SWM will host five salmon release events this May on the 3rd, 5th, 9th, 11th, and 13th for students participating in the SSS program. Teachers chose 30 students from each school to attend the event at the West Hylebos Wetlands Park. Students participate in a daylong field trip rotating through presentations and activities lead by staff from Earthcorps, Federal Way Historical Society, Trout Unlimited, National Audubon Society, and several other organizations.
- Town Square Park (TSP)- The City's new TSP will provide examples of LID techniques including permeable pavements, a rain garden, native plantings, educational signage, and interactive storm water educational elements for students and park users. Design and development of participatory elements and educational material for onsite will be developed through the WaterWorks grant. The LID Outreach Project at TSP will expand the SSS program even further by providing an outdoor laboratory to compliment the classroom experience.
- Expansion of the Spill Kit Program- SWM will partner again this year with the Environmental Coalition of South Seattle (ECOSS) to provide 50 automotive-related businesses in Federal Way stormwater education and free spill kits. ECOSS staff provides stormwater inspection support, a customized spill plan, and spill response training for managers and employees. The ECOSS team is able to provide outreach in multiple languages in addition to English which includes: Spanish, Vietnamese, Somali, Mandarin/Cantonese, and Amharic.
- Upper Joe's Creek Watershed Study- Upper Joe's Creek enters Lake Lorene and Lake Jeanne (referred to as the "Twin Lakes"), which have been affected by recurring blue-green algae blooms during the summer months, some of which have contained toxins at unsafe levels. To address this issue SWM received a \$66,000 Washington Department of Ecology Freshwater Algae Control Program grant to study the problem and provide public education to the community on the issue. This grant work began in October 2015 and will continue through June of 2017.
- Newsletters- SWM staff will continue to produce the quarterly *Lakeview* and *Waterlog* newsletters which cover a variety of topics on pollution prevention and general awareness of stormwater related issues. The newsletters are also used to inform the public about progress and implementation of the SWMP.

- Volunteer Events-Several volunteer events are planned for 2016 with the Korean Youth Ecology group, including tree planting, invasive plant removal, and stream clean ups. The annual Redondo Creek cleanup with students from Nautilus K-8 will take place in June.
- Workshops-SWM will host a number of stormwater-related workshops in 2016. These free workshops open to the public are part of the City's monthly Green Living Workshop Series. An example of the workshop topics this year include: green cleaning, organic gardening, natural lawn care, water conservation, building rain gardens, and smart septic care.
- SWM will continue to offer its "Fish Friendly" charity car wash program. Special kits, designed to divert wash water to the sanitary sewer system, are loaned out by the City for charity car washes at no cost. Approximately 30-40 kits are checked out each year.

Section 2 - Public Involvement & Participation Opportunities

The City encourages the public and interested parties to participate in the decision-making process involving the development and implementation of NPDES permit related activities and programs. Opportunities for public participation in the development of the SWMP include the following:

- March 7, 2016 Land Use and Transportation Committee meeting
- March 15, 2016 City Council meeting. These committees review many of the programmatic and policy changes proposed under the SWMP and allow public comment on all agenda items.
- The City's Surface Water Management webpage displays the updated SWMP and the Annual Report. Opportunity for public comment and participation is made possible via e-mail.

Section 3 – Illicit Discharge Detection & Elimination Program Activities

Federal Way maintains a robust program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into the municipal stormwater system. A summary of IDDE activities continued in 2016 is provided below:

- Federal Way currently has a vacancy for the Water Quality Program Coordinator position, who is responsible for the implementing the IDDE program. It is anticipated that a new coordinator will be hired in early 2016.
- Through SWM's annual commercial inspection program, private stormwater systems that discharge into the City's MS4 will be inspected to ensure maintenance complies with standards outlined in the NPDES permit.
- The SWM division will continue to enforce Ordinance 09-619 which prohibits non-stormwater discharges into the MS4 through its Illicit Discharge Detection and Elimination (IDDE) Program. Examples of illicit discharges include trash, construction materials, petroleum products, paint, pesticides, fertilizers, soap and wash water. SWM implements escalating enforcement procedures and actions pursuant to those outlined in the Federal Way Revised City Code.
- Follow-up training will be given to municipal staff, who, as part of their normal job duties, might observe an illicit discharge in the field. Training includes how to identify a potential illegal discharge and how to

properly respond.

- SWM will continue to update the map of Federal Way's municipal stormwater system (MS4). The map is updated on an ongoing basis to reflect new connections and changes based on field verification and SWM's pipe video inspection program.

Section 4 – Efforts to Control Runoff from Construction Sites

The City of Federal Way recognizes that construction site run-off is a major contributor to water quality degradation in the greater Puget Sound region. To address this issue and to better protect our natural waterways, the City's current construction site run-off program exceeds the minimum requirements of the current permit in many respects. However, the current permit will require the City to make any necessary changes in 2016 to development-related codes, rules, and standards in order to incorporate and require LID principles and Best Management Practices.

- The City will continue to implement and enforce the program to reduce pollutants in stormwater runoff to our MS4 from new development, redevelopment and construction site activities. The program includes a permitting process with site plan review, and inspection and enforcement capability to meet the standards for both private and public projects.
- By December 31, 2016, Federal Way will adopt and implement the new version of the King County Surface Water Design Manual which has been updated to include new Low Impact Development (LID) standards.
- City staff will review and revise our local development-related codes, rules, and standards to incorporate and require LID principles and LID Best Management Practices. The intent of the revisions is to make LID the preferred and commonly-used approach to site development.

Section 5 - Pollution Prevention, Operations & Maintenance Activities

SWM has an ongoing Operations and Maintenance (O&M) program to reduce stormwater impacts associated with maintenance and operations of City streets, facilities, and properties. The program applies to drainage infrastructure, which includes catch basins, pipes, open channels, as well as residential and regional retention/detention facilities. In 2016, Surface Water maintenance staff will continue to perform the required inspections and maintenance outlined in the permit in an effort to prevent and reduce pollutant runoff from municipal operations.

- Each year SWM staff inspects all known municipally owned and operated stormwater treatment and flow control facilities as required by the Permit. Currently, maintenance of facilities is conducted according to the standards in the 2012 King County Surface Water Design Manual. However, by December 31, 2016, Federal Way will adopt and implement new standards in the updated 2016 King County Surface Water Design Manual.
- By August 1, 2017 SWM must inspect, and clean when necessary, all catch basins owned by the City. The removal of sediments laden with contaminants and debris from stormwater catch basins is important to prevent pollution and maintain the flow of the stormwater system. SWM is on track to meet this requirement next year.
- Staff is required to implement a Stormwater Pollution Prevention Plan (SWPPP) for the maintenance and storage yard owned by the City located at 31130 28th Avenue South. This year staff plans to tighten up

policies and procedures to ensure proper pollution Best Management Practices are consistently being implemented and documented.

- During and after major storm events, facilities vulnerable to surface water related problems will be inspected to ensure the systems are functioning properly, and to determine/conduct any maintenance or repair needs.
- SWM will continue the Conditional Assessment Program as a tool to proactively manage the stormwater system to prevent flooding, drainage problems and water quality problems. The camera inspection program supports several NPDES related activities (on-going comprehensive mapping of the system, evaluation of Best Management Practices, improving the ability to trace spills and identify illicit connections to the stormwater system).

Section 6 – Planned Monitoring Activities

SWM will continue to pay into a collective fund to implement the Regional Stormwater Monitoring Program (RSMP). The RSMP is a collaborative monitoring program paid for by western Washington municipal stormwater Permittees, and administered by Ecology, designed to monitor and evaluate the effectiveness of the Best Management practices specified in the NPDES permits. The goal of the monitoring program is to provide an unbiased assessment of whether stormwater management actions are resulting in genuine progress towards regional water quality targets.

- SWM will pay into the collective fund to implement regional in-stream monitoring. The goal of the monitoring is to measure whether the health of lowland streams and shorelines in Puget Sound is improving or declining. A payment of \$21,673 is due August 15, 2016.
- SWM will pay \$36,111 into the fund to conduct stormwater effectiveness studies on behalf of the region. The goal is to provide widely applicable information about what BMP's work, or don't work, and how to improve stormwater management. Payment for the monitoring program is due August 15, 2016.
- SWM will also pay into the third component of the RSMP, the Source Identification Information Repository. The repository is designed to share information about source identification and elimination methods and identify opportunities for regional solutions to common illicit discharges and pollution problems. A payment of \$3,349 will be provided by August 15, 2016.

Conclusion

The annual report and SWMP update is posted on the City of Federal Way website at <http://www.cityoffederalway.com/node/1468>.

If at any time the City is unable to comply with terms and conditions of the permit, staff must notify the Washington State Department of Ecology within 30 days of becoming aware that non-compliance has occurred. Written notification must include a description of the non-compliance issue and steps planned or taken to achieve compliance. Federal Way remains in compliance with all of the requirements of the permit and is using all known, available, and reasonable methods of prevention, control, and treatment to prevent pollution into the surface waters of Washington State.

CALENDAR OF NPDES PERMIT RELATED ACTIVITIES 2013-2018

The timeline below provides an overview of the major activities and deadlines for implementing current and upcoming permit requirements.

Program Component	2013 Ongoing Implementation	2014	2015	2016	2017	Jan - July 31, 2018
A. Stormwater Management Plan	Continue to track costs and permit related activities. Update the SWMP annually.		By March 31: Include description of internal coordination in annual report.			
C.1 Public Education & Outreach	Continue public education program and create stewardship opportunities.	Measure change in behavior for 1 target audience.		By February 2: Use measure of behavior change to improve program.		
C.2 Public Involvement	Continue to provide opportunities for the public to participate in SWMP decision-making. Post online annual reports and SWMP Plan for previous calendar year by March 31 st of each year.					
C.3 Illicit Discharge Detection & Elimination	Continue implementing IDDE program. Provide municipal staff training. Maintain map of MS4.				By Dec 31: Field screen at least 40% of MS4.	By Feb 2: Update ordinance if needed. Field screen 12% of MS4.
C.4.a-f Control Runoff from Development	Continue to implement program addressing construction/post-construction runoff.			By Dec 31: Update City code to revised Appendix 1 standards. Revise development codes to make LID the preferred approach.	By March 31: Submit a summary of the review & revision of City codes.	Achieve at least 80% of scheduled inspections.
C.5 Municipal Pollution Prevention, Operation & Maintenance	Continue MS4 maintenance and inspections and provide staff training.				By Dec 31: Update maintenance standards to revised manual/code standards.	By August 1: Inspect all catch basins or document alternatives if used.
S8.A	Continue to provide description in each annual report of stormwater monitoring or stormwater- related studies conducted.					

S8.B Status & Trends Monitoring	By Dec 31: Notify Ecology which option selected for status and trends monitoring.	Option 1: By Aug 15 Pay annual payments to RSMP.		
		Option 2: By July 31 Begin stream monitoring.	Oct 1: Begin monitoring marine near shore.	Annual reporting per Ecology approved QAPP.
C. Effectiveness Monitoring	By Dec 31: Notify Ecology which option selected for effectiveness monitoring.	Option 1: By Aug 15 Pay annual payments to RSMP.		
		Option 2: By Feb 2 Submit QAPP to Ecology. By Oct 1: Begin flow monitoring.	Oct 1: Stormwater monitoring program fully implemented.	Annual reporting per Appendix 9.
S8.D Source ID & Diagnostic Monitoring		By Aug 15: Pay annual payments to RSMP.		

Attachment 2- Description of 2015 Public Education Activities

Storming the Sound with Salmon

Students in Federal Way learn about stormwater through a program called Storming the Sound with Salmon, a partnership between the Surface Water Management Division and the Federal Way Public School District. This beneficial science program brings stormwater education directly into the classrooms of 27 elementary, middle, and high schools in Federal Way. Students learn about stormwater and water quality issues while raising and caring for salmon in their school. A highlight of the program is when students release the salmon into the Hylebos creek in the spring. This highly successful program was awarded two grants in 2015 which will allow the program to substantially expand in 2016 by adding additional schools, updating the curriculum, and by installing stormwater educational elements at Town Square Park.

Volunteer Events

The Surface Water Management Division recognizes and appreciates the support and hard work of the hundreds of volunteers that contribute to our community each year. This year volunteers helped plant native vegetation at the West Hylebos Wetlands Park, remove invasive species from the City's blueberry farm and Dumas Bay Park, and remove trash from Redondo Creek. Volunteers also helped build a rain garden at a local elementary school, distributed restaurant pollution prevention posters, and installed over 500 curb markers in residential neighborhoods throughout the city this year.

Workshops

The Surface Water Management Division and the Solid Waste & Recycling Division staff collaborate to provide free monthly educational workshops for residents on topics related to sustainability. This year's topics included: Clutter Clearing, Green Cleaning, Backyard Chickens, Organic Gardening, Attracting wildlife, Natural Pest Control, Canning & Food Preservation, Worm Bins & Composting, Rain Barrels & Water Conservation, Intro to a Prepared Homestead, and Solar & Energy Conservation. The workshops are a great way to educate the public on environmental issues and provide people with specific actions they can take to help minimize the problem.

Newsletters

The Surface Water Management Division produces a quarterly newsletter, the Waterlog, which covers a variety of topics on pollution prevention and general awareness of stormwater related issues. Staff also produces a newsletter specifically tailored to residents of Steel Lake and North Lake as part of the local Lake Management District program. The 2015 quarterly issues of both newsletters are available on the City of Federal Way webpage.

Fish-Friendly Car Wash Program

Federal Way's Surface Water Management Division reminds businesses and charity groups that it is a violation of city code to allow dirty soapy water from car washing to enter storm drains. Realizing that car washes are an important fundraising tool for many groups in the community, the City offers an environmentally safe solution. The City has special kits available that pump wash water into the sanitary sewer system, keeping contaminants out of local surface waters. This year ten charity groups borrowed these kits, at no charge, from the Public Works Department.

Residential Car Washing

Per the request of a local homeowners association, staff provided public education and outreach to residents of a condominium complex on water quality issues related to car washing. Staff educated the residents of the environmental hazards associated with car wash run-off and offered residents alternatives to prevent pollution.

Waterfront Properties

This year staff mailed natural yard care information to all Puget Sound shoreline and lakefront property owners in the city. Three separate educational mailings were distributed over the course of the summer to over 500 households. Topics covered included building healthy soil, planting native vegetation, smart watering, and reducing the use of chemicals.

Septic Systems

Staff provided pro-active outreach to homeowners in the Joe's Creek Watershed that have an on-site septic system. Mailings were sent to encourage property owners to have their septic systems inspected and maintained regularly. Leaking septic systems can threaten local waterbodies.

Algae Blooms

Staff provided educational information to local lake communities regarding blue-green algae blooms. The outreach materials describe how to identify and report potential algae blooms and provide residents with ways they can reduce the amount of nutrients entering local water bodies. SWM distributed a fact sheet to the Twin Lakes community describing the City's efforts taken toward the blue green algae bloom issues in Lake Lorene and Lake Jeane. The fact Sheet described future grant work to be completed in 2016.

Dumpster Maintenance

An educational flyer was sent to all businesses in Federal Way reminding business owners and employees to keep dumpster areas clean, containers in good condition, and lids shut to reduce stormwater pollution.

Summertime School Cleaning

Staff mailed a letter to the principals and custodial staff of all Federal Way Public Schools prior to the end of the school year reminding staff of proper best management practices to prevent stormwater pollution during summer cleaning projects such as pressure washing, cleaning of floors, outdoor repairs and roof maintenance.

Mobile Pet Grooming

SWM staff mailed an educational stormwater brochure to mobile pet groomers that service Federal Way. The brochure explains steps that should be taken by mobile business owners to prevent stormwater pollution.

Natural Yard Care Workshop in Korean

SWM coordinated with the King County Dirt Alert Program to host a free natural yard care workshop for the Federal Way Korean Women Association in September.

Attachment 3 - IDDE Summary of Actions

Violator	Location/Address	Type of Discharge	Date of Report or Discovery	Initiation of Investigation	Days	SWM Code Enforcement Action	Enforcement Timeline			Date Investigation Terminated	Total Days for Compliance	Amanda Folder #	Amanda Status	Parcel	VuWorks	Sub Basin	Notes (see Water Quality file for detailed info)
							Date Issued	Date Due	Date Returned								
ABT Towing	33125 15th Ave S.	Petroleum wastes	2/18/14	on-going		NOV	02/20/14	N/A	N/A	Continue to monitor for compliance through 2015	on-going	14-100797	Under review	172104 9031	S-0911-0009	WH11	On-going investigation of off site stormwater petroleum discharges from junkyard. ERTS #646974 made for G-3 Notification 2/18/14. NOV deferred to Ecology for enforcement; agency to issue stormwater permit in 2014 under significant contributor status.
ABT Towing	33125 15th Ave S.	Sediment	10/20/14	on-going		Notice of Violation	3/18/15	4/1/15	N/A	Continue monitoring for proper vegetation coverage		15 101313		172104 9064			On going runoff of sediment laden stormwater from south side of ROW into MS4 resulting from ABT towing operations (parking of vehicles and equipment) disturbing soils. Business given two weeks to vacate area, ecology blocks installed to restrict access.
Pro Touch	31414 Pac Hwy S	Outdoor vehicle washing	1/22/15	1/22/15	1	Phone conversation and follow up Water Quality Violation Letter	2/17/15	N/A	N/A	3/12/15	23	15-100746	Investigation	092104 9286	S-0315-0013	WH11	Report from LUD concerning outdoor vehicle washing at the detail shop and discharge to storm. Inspection on 1/22 to confirm and immediate order to cease activity. Outdoor wash pad with drainage to sanitary installed on 2/19/15.
Private Hauler	ROW/SR 18 off-ramp from southbound I-5 to Enchanted Parkway	Diesel	1/27/15	1/27/2015	1	None	N/A	N/A	N/A	1/28/2015	1	N/A	N/A	N/A	N/A		Semi truck with punctured diesel tank exits I-5 southbound at SR 18 westbound. Trail of diesel leads to Shell station at Enchanted parkway. SWM, SKFR and Ecology responds. SWM protects downstream stormwater system with filters and absorbent dams. Ecology directs clean up effort and SWM provides final inspection (vactor pressure wash pavement and vactors waste). No downstream impacts.
Pavilions Apartments	1900 SW Campus Dr	Trash Compactor waste and tow carts with holes/open	1/29/15	1/29/15	1	Notice of Correction	2/3/15	N/A	N/A			15-100449	Investigation	132103 9103	S-0315-0023	WH14	On-going investigation into leaking trash compactors. Compactor at the east end of the complex documented to be disrepair and leaking, which is aggravated by the introduction of rainwater into the unit from open tow carts (some have holes). Notice of Correction issued requiring corrective action.

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Private residence (Dolney)	625 SW 297th	Sediment and erosion	2/2/15	2/2/15	1	Notice of Correction	2/6/15	2/20/15	N/A	Continue monitoring for proper vegetation coverage	92	15-100505	Compliance	720520 0030	S-0315-0014	CPP2	Sediment and erosion during rain events from unprotected side yard on slope. Conditions are contributing to impacts to MS4. Resident required to install proper S&E controls. Vegetation established 7/2/15.
Colonial Forest Condos	32600 1st Ave S	Various maintenance-related stormwater pollutants	2/6/15	2/6/15	1	Phone conversations and email with follow up Water Quality Violation Letter	2/17/15	N/A	N/A	5/15/15	87	15-100741	Investigation	169730 0000	S-0315-0015	WH12	Previous unconfirmed reports about prohibited stormwater discharges at property. Previous educational materials issued. Report received on 2/6 was confirmed in on site inspection (power washing moss into on site stormwater system). Water quality violation letter issued requiring implementation of proper BMPs. Follow up with information presented at condo board meetings.
Peking Wok	32921 1st Ave S	Restaurant grease	2/11/15	2/11/15	1	Water Quality Violation Letter	2/18/15	N/A	N/A	on-going		15-100782	Investigation	697900 0030	S-0315-0016	WH12	Poor BMPs with outdoor storage of restaurant grease in 55-gallon drum. Water quality violation letter issued requiring implementation of proper stormwater pollution prevention BMPs
Woodside Apartments	2517 S. 316th Lane	Potential trash tow cart wastewater	2/17/15	2/17/15	1	Water Quality Violation Letter	2/18/15	N/A	N/A	on-going		15-100771	Investigation	092104 9307	S-0315-0019	WH10	Observations made over time regarding the presence of holes in solid waste tow carts (and some without lids) leads to the issuance of a Water Quality Violation letter requiring corrective action. Will continue monitoring conditions for compliance.
Riverstone Apts	27314 24th Ave S	Potential trash tow cart wastewater	2/18/15	2/18/15	1	Water Quality Violation Letter	2/18/15	N/A	N/A	on-going		15-100759	Investigation	720480 0004	S-0315-0012	NPS9	Observations made over time regarding the presence of holes in solid waste tow carts (and some without lids) leads to the issuance of a Water Quality Violation letter requiring corrective action. Will continue monitoring conditions for compliance.
Valley Harvest	2855 Military Road	Produce and solid waste	2/18/15	2/18/15	1	Water Quality Violation Letter	2/18/15	N/A	N/A	on-going		15-100776	Investigation	042104 9037	S-0315-0020	GR01	Discarded produce and poor solid waste management practices at rear loading dock impacting stormwater quality at the business. SWM it investigate on site system with property owner.

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Celebration Park Apts	32205 11th Pl S	Potential trash tow cart wastewater	2/18/15	2/18/15	1	Water Quality Violation Letter	2/18/15	N/A	7/13/15	5/24/00		15-100768	Compliance	172104 9061	S-0515-0007	WH11	Observations made over time regarding the presence of holes in solid waste tow carts (and some without lids) leads to the issuance of a Water Quality Violation letter requiring corrective action. Will continue monitoring conditions for compliance. Manager indicated that new tow carts on order. All new tow carts installed.
Glen Park Apts	952 SW Campus Drive	Potential trash tow cart wastewater	2/18/15	2/19/15	1	Water Quality Violation Letter	2/19/15	N/A	N/A	on-going		15 100775	Investigation	192104 9005	S-0315-0017	WH14	Observations made over time regarding the presence of holes in solid waste tow carts (and some without lids) leads to the issuance of a Water Quality Violation letter requiring corrective action. Will continue monitoring conditions for compliance.
Club Palisades	2211 S. Star Lake Road	Potential trash tow cart wastewater and possible trash compactor leaks	2/19/15	2/19/15	1	Notice of Correction	2/19/15	N/A		on-going		15-100770	Investigation	720480 0095	S-0315-0021	NPS9	Observations made over time regarding the presence of holes in solid waste tow carts (and some without lids) leads to the issuance of a Water Quality Violation letter requiring corrective action. Also, potential that excessive liquid waste is causing trash compactor leaks.
Private residence	1927 SW 350th St	Laundry wastewater	2/24/15	2/24/15	1	None	N/A	N/A	N/A	03/03/15	7	15-101281	Compliance	795620 0130	S-0215-0017		Report of laundry wastewater being discharged to ROW/MS4. Property owner of renal house discontinues use of washer and makes repairs to piping. Prohibited discharges eliminated.
LDS Church	814 S. 308th St	Unknown foaming chemical dumping	2/26/15	2/26/15	1	Notice of Correction	3/2/15	N/A	N/A	3/10/15	12	15 100999	Investigation	082104 9148	S-0315-0022	CPR5	Citizen report received of excessive foaming in MS4 roadside ditch on S. 308th St . Investigation leads to LDS church. Required to vector out all impacted CBs and structures on site. G-3 notification provided to Ecology. However, inspections downstream in Cold Creek did not indicate impacts.
Sagemax	34210 9th Ave S	Zirconium dust	3/6/15	3/6/15	1	Notice of Correction	3/6/15	Immediately	N/A	4/2/15	27	15 101094	Investigation	926480 0090	S-0315-0018	WH09	SWM commercial site inspection documents large amounts of white zirconium dust tracked into rear parking lot with potential for stormwater pollution. Business required to vector out impacted portions of on-site stormwater system and to implement proper BMPs.
ROW	From 29039 7th Pl S. to 28912 7th Pl S.	Unknown (paint?)	3/18/15	3/18/15	1	N/A	N/A	N/A	N/A	03/18/15	1	N/A	N/A	N/A	S-0315-0029		Possible latex paint found by SWM video inspection crew possibly impacting several MS4 CBs. Cannot locate source or responsible party. Eversons dispatched to vector out all waste.

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IHOP	178 Campus Drive	Cooking oil	3/20/15	3/20/15	1	Notice of Correction	3/24/15	4/6/15	N/A	4/6/15	13	15-101403		415920 0720	S-0515-0008		Spillage of cooking grease around receptacle with impacts to on site storm drainage system. All waste properly mitigated. IHOP implements BMPs.
Burger Express	32805 Pac Hwy S.	Restaurant grease (illicit discharge)	5/16/14	5/16/14	1	Enforcement via email. Previous investigation.	05/16/14			Continue to monitor for compliance through 2015	on-going	13-103604	Investigation	172104 9065	S-1013-0026	WH11	Follow up on previous investigation. Additional grease coming out of roof ventilation system impacting stormwater quality. BMP installed on roof. Continue to monitor its effectiveness.
Best Western	32124 25th Ave S	Latex Paint	5/20/15	5/20/15	1	Notice of Correction	5/20/15	5/20/15	5/20/15	7/10/15	50	15 102579	Investigation	797820 0540	S-0515-0009		Painting contractor rinsing out equipment and discharging paint waste to on site storm system. System properly factored. Implementation of BMPs.
Spectrum Business Park	S. 341st Pl./ KAMG Management	Misc. Auto-related wastes	5/21/14	5/21/14	1	Enforcement via email. Previous investigation.	5/21/14	N/A	N/A	Continue to monitor for compliance through 2015	on-going	11-103092	Investigation	Various	S-0911-0007	WH08	Follow up on previous investigation. Additional auto-related (auto body) wastes documented over several week period from several business in commercial park. Property management firm required to fully implement the SWPPP that they developed in 2011.
Commercial Property	33310 Pac Hwy	Cooking oil	5/28/15	5/28/15	1	Notice of Correction	5/29/15	6/8/15	7/9/15	7/9/15	40	15-102552	Compliance	797820 0025	S-0515-0013		Poor management of cooking oil, significant discharge of waste to ground and around container. Required to properly clean up all spilled material and implement BMPs. Stormwater system not directly impacted.
Center Plaza	c/o Total Property management	Cooking oil	6/2/15	6/2/15	1	Notice of Correction	6/2/15	6/12/15	N/A	7/7/15	35	15-102552	Compliance	092104 9297			Poor management of cooking oil, significant discharge of waste to ground and around container. Receptacle moved to landscaped area.
The Crossings	35002 Pac Hwy S	Leaking compactor	7/1/15	7/1/15	1	Notice of Correction	7/1/15	7/15/15	N/A	07/07/15	6	15-103109	Investigation	185295 0050	S-0715-0006		Leaking dumpster. Material cleaned up and no further discharges noted.
Costco	35100 Enchanted Pkwy	Leaking compactor	7/10/15	7/10/15	1	Notice of Correction	7/14/15	7/28/15	7/28/15	07/28/15	18	15-103326	Compliance	219260 0180			Leaking compactor. Unit replaced with new.
Private residence	1423 S 289th St	Sediment	7/21/15	7/21/15	1	WQ Violation letter	7/21/15	N/A	N/A	7/21/15	1	N/A	N/A	516210 0470			Driveway construction with sediment released to ROW. Homeowner properly cleans up waste in the curb line.
Stacks	1706 S 320th	Cooking oil	7/21/15	7/21/15	1	Notice of Correction	7/22/15	8/4/15	7/31/15	7/31/15	9	15-103556		092104 9208			Mismanagement of cooking oil. Business required to implement proper BMPs.

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Farmers Market	Commons Mall	Food related waste	7/27/15	7/27/15	1	N/A	N/A	N/A	N/A	8/7/15	11	N/A	N/A	762240 0158			Food related waste discharged to on site CBs in Commons Mall west parking lot. Must have originated from farmers Market vendors. Farmers market hires vactor service to remove waste and distribute BMPs to all vendors.
Tender Care Mobile Dog Grooming	At 32637 39th PI SW	Soap	8/7/15	8/7/15	1	WQ Violation letter	8/7/15	N/A	N/A	N/A	N/A	N/A	N/A	N/A			SWM personnel observe illicit discharge of soap from mobile dog grooming business operating at 32637 39th PI SW. Cease and desist at the site. Issued BMP information to business and homeowner.
Property Owner	2650 SW DASH POINT RD	demolition debris	11/6/15	11/6/15	1	WQ Violation letter	11/12/15	12/31/15		on going	49	15100350 VO	open	1221039045			Inspector determined that buried materials represent a point source pollutant to ground and surface waters. Mike Fyles generated a Water Quality Violation Letter on 11-12-15 to order removal of all demolition debris by December 31 2015.
School District	Mirror Lake Elm.	wood chips causing IDDE	11/12/15	11/12/15		contact school to restore ROW remove wood chips	voicemail to school						closed				Call from adjoining property owner concerned about wood chip mulch causing water quality issue and blockage of storm drain. Will require school district to remove chips from ROW. Wood chips are an approved ground cover and do not harm water quality.
INVITATION HOMES	611 301 ST S	Organics turbidity, possible	11/24/15	11/24/15	2	STOP WORK	n/a	n/a	n/a	11/25/15	n/a	15105974 VO	open	5152000210	n/a		The property had sewer backup flooding the daylight basement level of the home. Water samples were taken from the catch basin and the illicit discharge had travel some distance. SWM required the plumbing contractor o have a Vactor truck respond immediately to jet the lines.
Property owner	33303 43 AVE SW &4306 SW 333	illicit no erosion control	12/8/15	12/8/15	3	Stop work	12/8/15			on going			open	1421039048 &1421039047			Fire Marshal called regarding illegal burning of structure possible erosion issues, responded and took pics stop work order no erosion control in place clearing and grading within wetland buffer zone

Attachment 4- Description of Stormwater Monitoring Studies

Sampling of Dumpster Leachate

Staff continued a small study to inspect conditions in trash enclosures and measure contaminants in dumpster/compactor leachate (chemical oxygen demand and biological oxygen demand). The study was conducted as part of the Surface Water Management's ongoing Illicit Discharge Detection and Elimination (IDDE) program which is designed to identify and eliminate sources of stormwater pollution.

Upper Joe's Creek

SWM staff conducted a minor amount of water quality monitoring in the Upper Joe's Creek watershed. This study was an effort to collect data that may be useful in identifying sources of nutrients (phosphorus) which may be adversely impacting the water quality entering the Twin Lakes (Lake Lorene and Lake Jeane) thereby driving summertime blue-green algae blooms. Sampling will continue in 2016 per the Freshwater Algae Grant Quality Assurance project plan.

S 356th RDF Effectiveness Monitoring

SWM water quality staff performed effectiveness monitoring of the South 356th Street RDF Retrofit and Expansion Project. The project is funded by the Department of Ecology through an agreement with King County. Federal Way is responsible for specific work elements including water quality monitoring of temperature, turbidity at several locations within the RDF, and sampling macroinvertebrates in the receiving waters.