



INFORMATIONAL MEMORANDUM

TO: Transportation and Infrastructure Committee
FROM: Bob Giberson, Public Works Director *BY*
BY: Greg Villanueva, NPDES Coordinator
CC: Mayor Ekberg
DATE: March 24, 2017
SUBJECT: NPDES Program
Project No. 99341210
2016 Annual Report and 2017 Stormwater Management Program Plan

ISSUE

Review the City's 2016 National Pollutant Discharge Elimination System (NPDES) Annual Report and 2017 Stormwater Management Program (SWMP) Plan.

BACKGROUND

The NPDES Program requires that the City implement a comprehensive SWMP Plan that complies with the requirements outlined in the City's current NPDES Phase II permit. The permit requires that the City develop a SWMP Plan and submit annual reports to the Department of Ecology (DOE) outlining our progress in meeting permit requirements by March 31st of each year.

The SWMP Plan document describes proposed activities for the current year training, procedural, and documentation requirements that the City must follow. The SWMP Plan is updated annually to reflect any required changes to our program and to provide greater detail as various programs are fully developed. Once the SWMP Plan is submitted to the DOE, it will be used to determine whether permit obligations are being met.

DISCUSSION

City staff completed the 2016 Annual Report, which reflects activities completed by the City in 2016. In addition, staff also updated the 2016 SWMP Plan to reflect permit requirements for 2017. All 2017 updates are printed in blue for reference. The 2016 Annual Report must be signed by the City Administrator and both documents electronically submitted to the DOE by the reporting deadline of March 31, 2017.

RECOMMENDATION

Information only.

Attachments: 2016 Annual Report
2017 Stormwater Management Program Plan



Annual Report

Category Name: General Obligations

Number	Permit Section	Question
1	S5.A.2	<p>Attach updated annual Stormwater Management Program Plan (SWMP Plan). (S5.A.2)</p> <p><input type="button" value="Choose File"/> No file chosen Saved Document Name: 2017 SWMP Plan Final sm_1_03212017020455</p>
2	S9.D.5	<p>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.</p> <p><input type="button" value="Choose File"/> No file chosen <input checked="" type="checkbox"/> Not Applicable</p>
3	S5.A.3	<p>Implemented an ongoing program to gather, track, and maintain information per S5.A.3, including costs or estimated costs of implementing the SWMP.</p> <p><input type="radio"/> Yes <input type="radio"/> No</p>
4	S5.A.5.b	<p>Coordinated among departments within the jurisdiction to eliminate barriers to permit compliance. (S5.A.5.b)</p> <p><input type="radio"/> Yes <input type="radio"/> No</p>

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Category Name: Public Outreach

Number	Permit Section	Question
5	S5.C.1.a.i and ii	<p>Attach description of public education and outreach efforts conducted per S5.C.1.a.i and ii.</p> <p><input type="button" value="Choose File"/> No file chosen Saved Document Name: 2016 Education and Outreach Ef_5_03212017020703</p>
6	S5.C.1.b	<p>Created stewardship opportunities (or partnered with others) to encourage resident participation in activities such as those described in S5.C.1.b.</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
7	S5.C.1.b	<p>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)</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
7b	S5.C.1.b	<p>Attach description of how this requirement was met.</p> <p><input type="button" value="Choose File"/> No file chosen Saved Document Name: 2016 Meas Underst Adopt Targ B_7b_03212017020703</p>
8	S5.C.2.a	<p>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)</p> <p>Opportunities are provided at</p>
9	S5.C.2.b	<p>Posted the updated SWMP Plan and latest annual report on your website no later than May 31. (S5.C.2.b)</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>


9b

S5.C.2.b

List the website address.

<http://www.tukwila.gov/pubw>

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Annual Report

Category Name: IDDE

Number	Permit Section	Question
10	S5.C.3.a.i - vi	Maintained a map of the MS4 including the requirements listed in S5.C.3.a.i.-vi. <input checked="" type="radio"/> Yes <input type="radio"/> No
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) <input checked="" type="radio"/> Yes <input type="radio"/> No
12	S5.C.3.b.vi	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) <input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Applicable
13	S5.C.3.c.i	Implemented procedures for conducting illicit discharge investigations in accordance with S5.C.3.c.i. <input checked="" type="radio"/> Yes <input type="radio"/> No
13b	S5.C.3.c.i	Cite methodology Illicit Discharge Detection an
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) 15
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) 206-431-1860

- 15b S5.C.3.c.ii Number of hotline calls received.

26
- 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 No
- 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)

Yes No
- 17b S5.C.3.c.iv Describe the information sharing actions. (S5.C.3.c.iv)

Information sharing for public
- 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 No
- 19 S5.C.3.d.iv Number of illicit discharges, including illicit connections, eliminated during the reporting year. (S5.C.3.d.iv)

20
- 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

No file chosen
 Saved Document Name: 2016 Annual Report IDDE
 Summar_20_03212017020740 Not Applicable
- 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 No

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Category Name: Runoff Controls

Number	Permit Section	Question
22	S5.C.4.a	<p>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.</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
23	S5.C.4.a.i-iii	<p>Revised ordinance or other enforceable mechanism to effectively address runoff from new development, redevelopment and construction sites per the requirements of S5.C.4.a.i-iii. (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)</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
23b	S5.C.4.a.i-iii	<p>Cite code reference for revised ordinance or other enforceable mechanism to address runoff from new development, redevelopment and construction sites.</p> <p>Ordinance No. 2516, 2517 & <input type="checkbox"/> Not Applicable</p>
24	S5.C.4.a.i	<p>Number of exceptions granted to the minimum requirements in Appendix 1. (S5.C.4.a.i., and Section 6 of Appendix 1)</p> <p>0</p>
25	S5.C.4.a.i	<p>Number of variances granted to the minimum requirements in Appendix 1. (S5.C.4.a.i., and Section 6 of Appendix 1)</p> <p>0</p>
26	S5.C.4.b.i	<p>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)</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>

- 26b S5.C.4.b.i Number of site plans reviewed during the reporting period.
88
- 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 No
- 27b S5.C.4.b.ii Number of construction sites inspected per S5.C.4.b.ii.
26
- 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 No
- 28b S5.C.4.b.iii Number of construction sites inspected per S5.C.4.b.iii.
26
- 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 No
- 31 S5.C.4.b.ii-iv Achieved at least 80% of scheduled construction-related inspections. (S5.C.4.b.ii-iv)
 Yes No

Number Permit Section Question

- 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 No
- 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 No
- 34 S5.C.4.c.i and ii Updated provisions to verify long-term operation and maintenance of stormwater treatment and flow control BMPs/facilities that are permitted pursuant to S5.C.4.a and b. (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.4.c.i and ii
 Yes No
- 35 S5.C.4.c.iii Annually inspected stormwater treatment and flow control BMPs/facilities per S5.C.4.c.iii.
 Yes No
- 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.
 Yes No 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 No Not Applicable
- 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 No Not Applicable

Number Permit Section Question

38b S5.C.4.c.vi Attach documentation of any maintenance delays. (S5.C.4.c.vi)

No file chosen

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 No

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 No

41 S5.C.4.f.i Reviewed, revised and made effective the low impact development-related enforceable documents per S5.C.4.f.i. (Required by December 31, 2016, except by June 30, 2017 for Permittees in Lewis and Cowlitz counties, and by June 30, 2018 for the City of Aberdeen)

Yes No

41b S5.C.4.f.ii Attach a summary of the LID review and revision process that includes the requirements listed in S5.C.4.f.ii. (Required with annual report due no later than March 31, 2017, except no later than March 31, 2018 for Permittees in Lewis and Cowlitz counties, and with the Fifth Year annual report for the City of Aberdeen)

No file chosen

Saved Document Name: LID Code Update Final Summary
_41b_03102017012033

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)

Yes No Not Applicable

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Annual Report

Category Name: O & M

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 Stormwater Management Manual for Western Washington (as amended 2014). (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). <input checked="" type="radio"/> Yes <input type="radio"/> No
44	S5.C.5.a	Applied a maintenance standard that is not specified in the Stormwater Management Manual for Western Washington. <input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Not Applicable
45	S5.C.5.a.ii	Performed timely maintenance per S5.C.5.a.ii. <input checked="" type="radio"/> Yes <input type="radio"/> No
46	S5.C.5.b	Annually inspected all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities. (S5.C.5.b) <input checked="" type="radio"/> Yes <input type="radio"/> No
46b	S5.C.5.b	Number of known municipally owned or operated stormwater treatment and flow control BMPs/facilities. (S5.C.5.b) 47
46c	S5.C.5.b	Number of facilities inspected during the reporting period. (S5.C.5.b) 47
46d	S5.C.5.b	Number of facilities for which maintenance was performed during the reporting period. (S5.C.5.b) 20

Number Permit Section Question

- 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.
- No file chosen
 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.
- Yes No Not Applicable
- 49 S5.C.5.d 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 No Not Applicable
- 49b S5.C.5.d Number of known catch basins.
5823
- 49c S5.C.5.d Number of catch basins inspected during the reporting period.
1582
- 49d S5.C.5.d Number of catch basins cleaned during the reporting period.
1582
- 50 S5.C.5.d.i-ii Attach documentation of alternative catch basin cleaning approach, if used. (S5.C.5.d.i or ii)
- No file chosen
 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 No
- 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 No

Number Permit Section Question

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 No Not Applicable

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Category Name: TMDL

Number	Permit Section	Question
54	S7.A	<p>Complied with the Total Maximum Daily Load (TMDL)-specific requirements identified in Appendix 2. (S7.A)</p> <p><input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Applicable</p>
55	S7.A	<p>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)</p> <p><input type="button" value="Choose File"/> No file chosen</p> <p><input checked="" type="checkbox"/> Not Applicable</p>

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Category Name: Monitoring

Number	Permit Section	Question
56	S8.A	Attach a description of any stormwater monitoring or stormwater-related studies as described in S8.A. <input type="button" value="Choose File"/> No file chosen <input checked="" type="checkbox"/> 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) <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable
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) <input checked="" type="radio"/> Yes <input type="radio"/> No
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) <input checked="" type="radio"/> Yes <input type="radio"/> No
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) <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable

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Annual Report

Category Name: General Obligations 2

Number	Permit Section	Question
61	G3	Number of G3 notifications provided to Ecology. 9
62	G3.A	Took appropriate action to correct or minimize the threat to human health, welfare, and/or the environment per G3.A. <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> 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) <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable
64	S4.F.3.a	If requested, submitted an Adaptive Management Response report in accordance with S4.F.3.a. <input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> 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) <input type="button" value="Choose File"/> No file chosen <input checked="" type="checkbox"/> 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) <input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Applicable

67	G20	Number of non-compliance notifications (G20) provided in reporting year. 0
67b	G20	List the permit conditions described in non-compliance notification(s). <input checked="" type="checkbox"/> Not Applicable

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2016 Education and Outreach Efforts

The City of Tukwila has an active public educational and outreach program, regarding general impacts of stormwater on surface waters, using the following approaches and target audiences:

- Stormwater topics were inserted into utility bill mailings and posted on the City's NPDES web page and brochures and flyers placed at strategic locations. Topics included Low Impact Development and Discharging Carpet Wastewater to a Storm Drain is Illegal.
- The City conducted a Stormwater Survey and Assessment in 2015 which measured the public's understanding of stormwater pollution and its effects on our creeks, river, and the Puget Sound. The City used the findings from 2015 and in 2016 targeted City residents and businesses by informing them of a priority 1 issue regarding impervious pavement, sediment, automotive fluid leaks, car wash soapy water runoff and pet waste.
- In 2016, the City posted LID Code update findings, draft amendments to our City Development Codes and draft amendments to our City Infrastructure Design and construction Standards. The City also posted the 2016 King County Surface Water Design Manual and 2016 King County Stormwater Pollution Prevention Manual. The City's NPDES web page also posted an Illicit Discharge Detection & Elimination video that is available in English and Spanish and a Lost and (Puget) Sound stormwater video directed at school aged children.
- The City provided an NPDES Inspection Van that included interactive stormwater testing at a City sponsored Touch a Truck event that is held annually. Interactive water sample testing was conducted with the public to promote water quality in Gilliam Creek, Riverton Creek, Southgate Creek, Johnson Creek, cottage Creek and the Green/Duwamish River.
- The City provided a SWMP booth at the annual Backyard Wildlife Festival. Staff promoted low impact development by demonstrating how pervious concrete works and conducted a hands-on water sampling demonstration using a turbidity meter and pH test kits. Also, staff engaged with the children using a Child Passport Questionnaire regarding stormwater quality.
- A variety of brochures are made available, and are handed out during residential and business storm drainage inspections on Low Impact Development, Protecting Washington's Waters from Stormwater Pollution and Antifreeze Recycling.
- The City uses government Channel 21 which was implemented as a tool to provide updates and information.



2016

Measuring the Understanding and Adoption of Targeted Behaviors

The City conducts ongoing phone surveys to measure the general public's knowledge and practices regarding stormwater in the City of Tukwila. In addition, the research assesses Tukwila businesses stormwater practices and behaviors. The City uses the research for stormwater planning as well as educational outreach to improve the target audience's understanding of the stormwater impacts.

For 2016 the City used the results of the 2015 survey which the following outcomes were identified:

1. Determined the overall public perception of the quality of surface water in Tukwila and compared it to the previous year' rating.
2. Identified Priority 1, priority 2 and Priority 3 issues for Tukwila residents. This helps to determine what perceptions, behaviors, and practices need the most attention as well as provide direction for an educational outreach program.
3. Identified shifts and trends in Identified Priority 1, priority 2 and Priority 3 issues that occurred from previous years.
4. Identified Priority 1, priority 2 and Priority 3 issues for residents and property owners.

The 2015 survey indicated there was a 20% drop in correct answers regarding the true or false statement "***carpet shampoo wastewater can be safely added to a stormwater drain***".

For this reason, the City chose to target the public and businesses by inserting a ***Discharging Carpet Wastewater to a Storm Drain is Illegal***" information sheet into a surface water utility billing.



City of Tukwila

2017 Update

Stormwater Management Program Plan

(SWMP) Plan

Prepared By

City of Tukwila
Public Works Department

City of Tukwila

Stormwater Management Program Plan

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INTRODUCTION

The National Pollutant Discharge Elimination System (NPDES) permit program is a requirement of the federal Clean Water Act. The federal Environmental Protection Agency (EPA) has delegated permit authority to state environmental agencies. In Washington, the NPDES delegated permit authority is the Washington State Department of Ecology (DOE).

The City of Tukwila prepared this document to meet the requirements for a Stormwater Management Program (SWMP) Plan as required by the NPDES Phase II Stormwater Permit issued to the City of Tukwila by DOE. The SWMP Plan was developed to reduce pollutant discharges from the City's Municipal Separate Storm Sewer System (MS4).

Tukwila is defined as a Phase II community by DOE and, therefore, mandated to comply with the requirements of the NPDES Phase II Stormwater Permit. Phase II communities are those that:

- Own and operate a storm drain system
- Discharge to surface waters of the state
- Are located in urbanized areas
- Have a population of more than 1,000

Municipalities with a population of over 100,000 (as of the 2010 census) have been designated as Phase I communities and must comply with DOE's Phase I NPDES Municipal Stormwater Permit. Tukwila's population is below the 100,000 threshold and must comply with the Phase II Municipal Stormwater Permit. Approximately 100 other municipalities in Washington must now comply with the Phase II Permit, as operators of small "municipal separate storm sewer systems" (MS4). Ecology's Phase II Permit is available on Ecology's website at:

<http://www.ecy.wa.gov/programs/wq/stormwater/municipal/phaseIIww/wwphiipermit.html>

Tukwila completed requirements of its initially issued NPDES Phase II Stormwater Permit which expired July 31, 2013. Tukwila applied to the Department of Ecology and was issued a new five-year term NPDES Phase II Stormwater Permit on August 1, 2012 with an effective date of August 1, 2013 and an expiration date of July 31, 2018. The Permit was then modified and reissued December 17, 2014 with an effective date of January 16, 2014 to further control the discharge of pollutants to protect surface water and ground water quality in Washington State

The Permit allows discharge of stormwater runoff from municipal drainage systems into the state's water bodies (i.e., streams, rivers, lakes, wetlands, etc.) if municipalities implement programs to protect water quality by reducing the discharge of "non-point source" pollutants to the "maximum extent practicable" (MEP). In addition, the City must meet "all known and reasonable treatment" (AKART) through application of Permit specified "best management practices" (BMPs).

The majority of Tukwila's MS4 either drains to Riverton Creek, Southgate Creek, Gilliam Creek, Johnson Creek or directly to the Green/Duwamish River. The remaining areas infiltrate into the ground.

NPDES PHASE II PROGRAM COMPONENTS

The practices specified in the Permit are collectively referred to as the SWMP Plan and grouped under the following program components:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Controlling Runoff from New Development, Redevelopment, and Construction Sites
- [Municipal](#) Operation and Maintenance
- [Special condition](#), Total Maximum Daily Load Requirements
- [Special condition](#), Monitoring and Assessment

The following sections describe requirements of each program component and the City's planned activities to meet the requirements. In general, the City of Tukwila is currently performing all previously required Permit activities and has programs in place to address the updated Permit requirements.

1. Public Education and Outreach

1.1 Permit Requirements

The Permit (Section S5.C.1.) requires the City to:

- Target and implement an educational and outreach program that will build general awareness to the general public, businesses, engineers, contractors, developers, development staff and land use planners and other City employees that will help to reduce and eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.
- Implement an outreach program that targets a selected audience with the purpose of improving their understanding and behaviors that impact surface water.
- Create stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities such as stream teams, storm drain marking, volunteer monitoring, riparian plantings, and education activities.
- Measure the understanding and adoption of the targeted behaviors for at least one selected audience and one selected topic.
- Track and maintain records of public education and outreach activities.

1.2 Target Audiences and Activities

[The City's education and outreach program targets the following audiences:](#)

- [General public, with an emphasis on school age children.](#)
- [Contractors, developers, carpet cleaning, landscapers, automotive/truck facilities, and general businesses, specifically restaurants.](#)
- Residents/homeowners and apartment managers/owners.
- City development staff, land use planners, maintenance personnel and other City employees.

The City uses the following resources to help build stormwater awareness:

- Tukwila's government Channel 21, which was implemented as a tool to provide updates and various types of information to the public.
- Tukwila Reporter, Hazelnut Newsletter, various brochures, handouts, and bulletin boards at various locations,
- NPDES website where public notices, meeting dates, educational videos and course catalogs can be viewed.
- Urban Watershed Display Boards at five strategic locations on the Green/Interurban trail along the Green/Duwamish River.

The City implemented the following outreach activities:

- Provide an outreach booth at the City's annual Backyard Wild Life Festival, giving exposure to the City's SWMP Plan and encouraging input to the Plan. This year the outreach booth will again emphasize Low Impact Development and Illicit Discharge Detection and Elimination. In addition, target school age children by challenging them with stormwater quality questions.
- Display an NPDES inspection truck and various IDDE posters at the annual City Touch a Truck event.
- Partner with Environmental Coalition of South Seattle (ECOSS) and provide a spill kit, spill plan and training to 25 diverse businesses through ECOSS Spill Kit Incentive Program.
- This year the City inserted information regarding LID, surface water rates, frequently-asked stormwater questions and keeping rivers/streams clean into its surface water utility billing which is mailed semi-annually.

The City uses the following stewardship opportunities to engage with the public:

- The City partners with Forterra, EarthCorps, and Friends of Duwamish Hill Preserve to provide stewardship training and restoration activities in City parks and shoreline areas.
- The Green Tukwila 20-year Stewardship Plan is complete and site specific Stewardship Plans are being developed for three of 17 various parks. These plans will be the guideline for restoration and stewardship activities.

The City measured the understanding and adoption of the targeted behaviors of the following targeted audiences and topics:

- This year the City phone survey program will target citizens, restaurants, property owners/managers and automotive companies in the subject areas of general impacts of stormwater on surface waters and LID principles. The survey will be used to measure the citizen's knowledge of proper stormwater practices.

2. PUBLIC INVOLVEMENT AND PARTICIPATION

2.1 Permit Requirements

The Permit (Section S5.C.2) requires the City to:

- Provide ongoing opportunities for public involvement and participation through advisory councils, public hearings, watershed committees, participating in developing rate-structures, SWMP Plan development and implementation or other similar activities.
- Make available and post the current SWMP Plan and annual report for the previous years on the City's website no later than May 31 of each year. Make available to the public all other documents to be submitted to DOE as required by the Permit.

2.2 Activities

The City of Tukwila uses the following opportunities for Public Involvement and Participation:

- The public is invited to all City Council, Committee of the Whole, [and Transportation and Infrastructure](#) Committee meetings including workshops where input on NPDES Phase II related topics is accepted.
- Provide notices of upcoming workshops, in the Tukwila Reporter, City's NPDES website, and [City calendar](#). In addition, notices will be posted at strategic locations such as City Hall, Public Works and Community Development area and the Tukwila Community Center.
- The City maintains the most current SWMP Plan and Annual Report on its NPDES website. These documents are also made available to the public upon request.
- Invite the public to participate in the decision making process involving proposed rate increases, and implementation and update of the annual SWMP Plan through advisory councils, public meetings, and watershed committees.
- The City will make available and update its website with current NPDES information including the current SWMP Plan and Annual Report on its website: www.tukwilawa.gov/pubwks/npdes by May 31 of each year.

3. ILLICIT DISCHARGE DETECTION AND ELIMINATION

3.1 Permit Requirements

The Permit (Section S5.C.3) requires the City to:

- Implement an ongoing Illicit Discharge Detection and Elimination (IDDE) program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into our MS4.
- Periodically update the City's municipal storm sewer system map.
- Have an ordinance in place to effectively prohibit non-stormwater, illegal discharges, and dumping into the City's MS4, including locating priority areas likely to have illicit discharges.

- Implement a field screening methodology appropriate to the characteristics of the MS4 and water quality concerns. Complete field screening for at least 40% of the MS4 no later than December 31, 2017, and on average 12% each year thereafter.
- Implement an ongoing program designed to detect, identify and address non-stormwater discharges, illicit connections, and spills. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper waste disposal.
- Provide training to appropriate City employees on IDDE. Document training events, staff attendance and maintain records of activities conducted to meet Permit requirements. Conduct follow-up training as necessary to address changes in procedures, techniques, requirements, or staffing.

3.2 Activities

The City of Tukwila has an ongoing IDDE program in place that include the following activities:

- The City conducts residential, commercial, and industrial storm drainage inspections of permit issued projects. In addition, the City has an ongoing business inspection program that targets businesses with potential pollution generating activities.
- The City maintains a geographic (GIS) mapping program of [its stormwater drainage system which](#) is used to conduct IDDE investigations. [These maps are available](#) to the public and interested parties upon request.
- The City has an ordinance and program in place that prohibits non-stormwater, illegal discharges, and dumping into the City's MS4, including locating priority areas likely to have illicit discharges. The ordinance also provides for escalating enforcement.
- The City has an active IDDE inspection program that includes both private and public stormwater facilities using [methods indicated in the Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual](#).
- [The City is active with field screening of all accessible stormwater outfalls.](#)
- The City's Maintenance Department provides ongoing video inspection of [the public](#) stormwater conveyance system. [In addition, ongoing inspections of catch basin/manholes, ditches and stormwater BMPs are conducted.](#)
- The City has an advertised reporting phone number, (206) 433-1860, where illegal dumping, [illicit discharges and](#) spills can be reported. [Also, the City initiated Tukwila Works where online reporting is available.](#)
- Appropriate training is provided to City employees, including new hires on IDDE into the City's MS4.
- Provide and make available various brochures to help increase public awareness of the City's stormwater issues. Continue to provide public outreach videos on the City's NPDES website.
- The City provides information regarding the hazards associated with illegal discharges and improper waste disposal to the general public, businesses, and public employees.

- The City has a Suds Safe Car Wash Program that makes car wash kits available to Tukwila citizens for fund raising events held within Tukwila city limits.

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

4.1 Permit Requirements

The Permit (Section S5.C.4) requires the City to:

- Implement and enforce an ordinance or other mechanism that addresses stormwater runoff and pollutant generating activities to its MS4 from any new development, redevelopment, and construction site activities. This applies to both private and public development, including roads.
- Have in place a permitting process for residential and commercial site plan review, inspection, and enforcement capability necessary to implement the requirements of the Permit.
- Have provisions in place to verify adequate long-term operation and maintenance (O&M) of new stormwater treatment and flow control BMPs/facilities permitted and constructed. Establish maintenance standards that are as protective as those in Chapter 4 of Volume V of the 2012 *Stormwater Management Manual for Western Washington* by December 31, 2016.
- Make available as applicable copies of the “*Notice of Intent for Construction Activity*” and copies of the “*Notice of Intent for Industrial Activity*” to representatives of proposed new development and redevelopment.
- Ensure proper staff is trained to conduct inspection and enforcement as necessary and provide follow-up training as needed to address changes in procedures, techniques, or staffing. Record and maintain records of training provided and a list of staff that have been trained.
- Review and revise the City’s development codes, standards, and specifications to incorporate and require Low Impact Development (LID) principles and LID best management practices (BMPs) as the preferred method for development by December 31, 2016.
- Participate in watershed-scale stormwater planning under condition S5.C.5.c of the Phase I Municipal Stormwater General Permit if required.

4.2 Activities

The City has an active program to reduce pollutants in stormwater runoff from new development, redevelopment, and construction sites that includes the following:

- [The City adopted and implements the 2016 King County Surface Water Design Manual \(KCSWDM\)](#) as direction to address stormwater runoff and water quality for both public and private projects, including roads.
- [As part of the permitting process, pre-application meetings and weekly plan review meetings are conducted to insure applicants project plan submittal will meet stormwater regulations and that long-term operation and maintenance of water quality and flow control will meet the 2016 KCSWDM maintenance standards.](#)

- All construction sites are inspected prior to start, during, and post construction. This includes annual post-construction of all commercial and residential treatment and flow control BMPs/facilities whereby maintenance responsibility, standards and inspection procedures are addressed.
- The City has a long term Operations and Maintenance (O&M) program for post-construction stormwater facilities and BMPs that include inspection, review, and documentation.
- The City directs representatives of proposed new development and redevelopment to the Department of Ecology's construction stormwater website: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/enoi.html> and if applicable make available to the representatives a "Notice of Intent (NOI) for Industrial Activity".
- Staff responsible for inspection are fully trained and receive ongoing training in erosion control, low impact development, stormwater, and updated inspection techniques. Records of training are maintained and available upon request.
- Document and maintain records of all new development and redevelopment and construction site activities, including inspections and enforcement actions.
- The City incorporated into its development-related codes, rules, standards, and enforceable documents, Low Impact Development (LID) and Best Management Practices (BMPs) making LID and BMPs the preferred method for development.
- The City will continue to train pertinent employees on LID and BMPs. In addition, post LID training events on the City's website.
- Currently, King County has not selected Tukwila as a participant in the watershed-scale stormwater planning process, consequently, no action required.

5. MUNICIPAL OPERATIONS AND MAINTENANCE

5.1 Permit Requirements

The Permit (Section S5.C.5) requires the City to:

- Implement an operations and maintenance program with the ultimate goal of preventing or reducing pollutant runoff from the MS4 and municipal operations.
- Implement maintenance standards that are as or more protective, of facility functions than those specified in *Chapter 4 of Volume V of the 2012 Stormwater Management Manual for Western Washington* by December 31, 2016.
- Conduct annual inspections of all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities, and conduct necessary maintenance actions that will meet City adopted standards.
- Conduct spot checks, of City owned flow control and water quality facilities after major storm events, and repair if needed or perform any necessary maintenance.
- Inspect all City owned catch basins and inlets at least once no later than August 1, 2017 and every two years thereafter. Clean catch basins if needed to comply with maintenance standards.
- Maintain compliance with an established inspection program designed to inspect all sites, achieving at least 95% of inspections per requirements of the Permit.
- Implement an operations and maintenance (O&M) program with the ultimate goal of preventing or reducing pollutant runoff from all lands owned or maintained by

the City, including but not limited to, streets, parking lots, roads, highways, buildings, parks, open space, road right-of-ways, maintenance yards, and stormwater treatment and flow control BMPs/facilities.

- Conduct ongoing training for employees whose primary construction operations or maintenance job functions may impact stormwater. Document and maintain records of training provided and the staff trained.
- Training public works personnel including field staff, new employees, development review and planning department personnel relating to Low Impact Development (LID) principals and LID Best Management Practices (BMPs).
- Provide a Stormwater Pollution Prevention Plan (SWPPP) for all City owned or operated heavy equipment maintenance or storage yards and material storage yards. A schedule for implementation of structural BMPs and periodic inspections shall be included in the SWPPP.
- Maintain ongoing records of inspections, maintenance, or repairs conducted to meet performance measures.
- Maintain records of [inspections and maintenance or repair activities](#).

5.2 Activities

The City of Tukwila's Operations & Maintenance (O&M) program includes the following:

- [Adoption of the 2016 King County Surface Water Design Manual \(KCSWDM\) in December 2016](#) which is used to implement our O&M program reducing and preventing pollutant runoff from municipal operations.
- [Adoption of the 2016 King County Stormwater Pollution Prevention Manual \(KCSPPM\) in December 2016](#) which is used as a maintenance standard guideline for industrial, commercial, and multi-family and residential properties.
- Catch basins and conveyance system including flow and water quality facilities are inspected, cleaned, and maintained on a circuit based program and as necessary.
- [Conduct street sweeping activities in support of catch basin cleaning](#).
- [Staff maintains a list of potential problem areas that are monitored and maintained prior to, during and after major storm events. Additional inspections occur at the discretion of the surface water department.](#)
- [Annually inspect and provide](#) necessary maintenance of all water quality and flow control facilities, including catch basins owned and operated by the City.
- Continue with the City's street sweeping program helping to reduce the amount of sediment and associated waste from entering the storm drainage system.
- Provide necessary training for City employees whose job functions may impact stormwater.
- [The City has in place a SWPPP for each of its maintenance and storage yards that is reviewed annually to determine if updates are needed. In addition, records are kept of routine inspections of these facilities and their BMPs.](#)
- [The City maintains records of its circuit based storm drainage system inspection, cleaning and repair activities and street sweeping.](#)

6. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

The Permit (Special Condition Section S7) requirements:

The Permit (Section S7) requirements apply if an applicable Total Maximum Daily Load (TMDL) is approved for stormwater discharges from MS4s owned or operated by the Permittee. Applicable TMDLs are TMDLs which have been approved by EPA on or before the issuance date of this Permit or prior to the date that Ecology issues coverage under this permit, whichever is later. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards. The DOE determines the reduction of pollutant discharge needed to be compliant with water quality standards.

6.1 Activities

- A TMDL has not been established for the City of Tukwila at this time, consequently no action needed.

7. MONITORING AND ASSESSMENT

The Permit (Special Condition Section S8) requires the City to:

- Notify DOE of its choice to independently conduct Status and Trends Monitoring and Effectiveness Studies, or participate by paying annually into the Regional Stormwater Monitoring Program (RSMP) that will be conducted by DOE.
- Pay into the RSMP to implement the Source Identification Information Repository (SIDR) element of the RSMP.
- Track and Document additional monitoring conducted and summarize in the 2016 Annual Report.

7.1 Current Activities

- The City paid a fee of \$4,444.00 into the RSMP to have DOE conduct the Status and Trends Monitoring.
- The City paid a fee of \$7,405.00 into the RSMP to have DOE conduct the Effectiveness Studies.
- The City paid a fee of \$687.00 into the RSMP to have DOE conduct the Source ID and Diagnostic Monitoring.

The total fee of \$12,536 is due each year by August 15th until the permit expiration date of July 31, 2018.

CONCLUSION

On August 1, 2013, the City of Tukwila's new 5-year term NPDES Phase II permit went into effect and was modified January 16, 2014. This Stormwater Management Program Plan has been prepared to demonstrate compliance with the requirements of this current NPDES Phase II Permit. This SWMP Plan will be a working document with updates annually until the permit expires on July 31, 2018. LID and monitoring requirements are the significant changes to the new Permit.

The City's Public Education and Outreach Program is an extension of the previous permit term and will continue to grow with the planned activities. The City of Tukwila will continue to reach out and encourage public involvement and participation in the City's SWMP Plan with the existing notification process.

The City's IDDE Program is in place, which includes a spill hotline, and will be reviewed periodically to ensure performance measures are met.

The City adopted the *2016 KCSWDM, KCSPPM* and revised its standards and codes to include LID and BMPs as the preferred method for development in December 2016, and uses it for controlling runoff from new development, redevelopment, and construction sites.

The City of Tukwila's Operations & Maintenance (O&M) is very active in all areas of permit compliance. It should be noted; The *2016 KCSWDM & KCSPPM* have new maintenance standards that O&M will follow.

Coordination efforts will continue with neighboring jurisdictions and be reviewed to determine where improvements are needed to remove jurisdictional barriers.

Total Maximum Daily Load requirements in Tukwila have not been determined by DOE to date. However, the City will prepare for this requirement if and when it comes due.

The City chose to participate in the RSMP collective fund and have DOE administer and conduct the Monitoring and Assessment for this Permit term.

Additional information on the City's NPDES program can be found online at <http://www.tukwilawa.gov/pubwks/npdes.html>.

The public is encouraged to participate in the development of the SWMP Plan. Please contact Greg Villanueva of the City of Tukwila's Public Works Department with questions, comments, or ideas at:

Mail: Greg Villanueva, NPDES Coordinator
Department of Public Works
City of Tukwila
6300 Southcenter Blvd, Suite 100
Tukwila, WA 98188-8548

Phone: 206-431-2442

Email: greg.villanueva@tukwilawa.gov

Website: www.tukwilawa.gov/pubwkds.npdes.html