CITY OF PUYALLUP



2017 STORMWATER MANAGEMENT PROGRAM PLAN

(SWMPP)

Prepared by City of Puyallup Office of the City Engineer Stormwater Engineering March 2017

TABLE OF CONTENTS

1	INTRODUCTION	1-1
	1.1 Overview and Background	1-1
	1.2 Phased Permit Requirements	1-2
	1.3 Department Responsibilities	1-2
	1.4 Total Maximum Daily Load (TMDL) Compliance	1-3
	1.5 Document Organization	1-3
2	STORMWATER MANAGEMENT PROGRAM ADMINISTRATION	2-1
	2.1 Permit Requirements	2-1
	2.2 Current Activities	2-1
	2.3 Planned Activities	2-2
3	PUBLIC EDUCATION AND OUTREACH	3-1
Ũ	3.1 Permit Requirements	3-1
	3.2 Current Activities	3-1
	3.3 Local Source Control	
	3.4 Planned Activities	3-3
٨		11
4	4 1 Permit Requirements	4-1 <i>A</i> _1
	4.1 Current Activities	
	4.3 Planned Activities	4-1
_		
5	ILLICIT DISCHARGE DETECTION AND ELIMINATION	5-1
	5.1 Permit Requirements	5-1
	5.2 Current Activities	
	5.3 Planned Activities	
6	CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT AND CONSTRUCTION	ON SITES6-1
	6.1 Permit Requirements	6-1
	6.2 Current Activities	6-1
	6.3 Planned Activities	6-2
7	POLLUTION PREVENTION AND OPERATION AND MAINTENANCE FOR MUNICIPAL OPERATIO	NS7-1
	7.1 Permit Requirements	7-1
	7.2 Current Activities	7-2
	7.3 The City maintains records of the above-live activities and summarizes them in its Annual Report	t by March
	31 ^{st,} of each year.Planned Actions	7-2
8	COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS	8-1
	8.1 Permit Requirements	8-1
	8.2 Current Activities	8-1
	8.3 Planned Activities	8-2

9 MONITORING AND ASSESSMENT	
9.1 Permit Requirements	
9.2 Current Activities	
9.3 Planned Activities	9-3
APPENDIX A	1
Acronyms and Definitions	1
APPENDIX B	1
2016 City of Puyallup Stormwater Education and Outreach Plan	1
APPENDIX C	ERROR! BOOKMARK NOT DEFINED.
Local Source Control Partnership, 2013-2015 Biennium Report	Error! Bookmark not defined.

LIST OF TABLES

Table 2-1. 2014 Stormwater Management Administration Program Work Plan	2-2
Table 3-1. 2016 Public Education and Outreach Work Plan	3-3
Table 4-1. 2016 Public Involvement Work Plan	4-2
Table 5-1. 2016 Illicit Discharge Detection and Elimination Work Plan	5-2
Table 6-1. 2016 Controlling Runoff from Development, Redevelopment, and Construction Sites Work Plan	6-2
Table 7-1. 2016 Pollution Prevention and Operations and Maintenance Work Plan	7-3
Table 8-1. TMDL Plan Implementation Activities	8-2
Table 9-1. 2016 Monitoring and Assessment Activities	9-4

CITY OF PUYALLUP 2017 STORMWATER MANAGEMENT PROGRAM PLAN

1 INTRODUCTION

1.1 Overview and 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 recreational uses such as fishing and swimming. 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 (Ecology).

Municipalities with a population of over 100,000 (as of the 1990 census) have been designated as Phase I communities and must comply with Ecology's *Western Washington Phase I NPDES Municipal Stormwater Permit*. With Puyallup's 1990 census falling below the 100,000 threshold, the City must comply with the *Western Washington Phase II Municipal Stormwater Permit*. About 100 other municipalities in Washington must now comply with the Phase II Permit, along with Puyallup, as operators of small municipal separate storm sewer systems (MS4s).

The Permit allows municipalities to discharge stormwater runoff from municipal drainage systems into the State's waterbodies (i.e., streams, rivers, lakes, wetlands) as long as municipalities implement programs to protect water quality by reducing the discharge of "non-point source" pollutants to the "maximum extent practicable" (MEP) through application of Permit-specified "best management practices" (BMPs). The practices specified in the Permit are collectively referred to as the Stormwater Management Program (SWMP) and grouped under the following components:

- Public Education and Outreach
- Public Involvement
- Illicit Discharge Detection and Elimination
- Controlling Runoff from Development, Redevelopment, and Construction Sites
- Pollution Prevention and Municipal Operation and Maintenance
- Monitoring

The Permit requires the City to report to Ecology annually on March 31st of the year on progress of permit implementation. This is achieved by submitting an annual report by March 31st for the preceding year. The Permit also requires submittal of a document outlining activities planned for the coming year to address the current permit requirements; this document is called the <u>Stormwater Management Program Plan (SWMPP)</u>. Implementation of the various Permit conditions is phased throughout the Permit term, with each year of the permit term adding new requirements and activities to be completed by the municipal staff.

As of 2017, Ecology's NPDES program is operating under the third issued permit. The City has been covered under each of the three issued permits:

- February 16, 2007 through July 31, 2012
- August 1, 2012 to July 31, 2013 ("interim" permit)

• August 1, 2013 through July 31, 2018 (current permit)

The (2005-2012) Permit was revised and reissued at the end of this period. A 2011 legislative change directed Ecology to reissue the existing Phase II permits unchanged for the interim period 2012-2013. A fully-updated Phase II, five year NPDES municipal stormwater general permit (MSWGP) was issued with an effective date of August 2013 through July 2018. This permit underwent a modification in response to challenges to the permit. The modified permit was issued with an effective date of January 16, 2015.

This document is the City's written documentation of the *Stormwater Management Program Plan (SWMPP)*. The remainder of this 2017 SWMPP document describes actions Puyallup will take to maintain compliance during the 2017 calendar year, as required by the Permit (i.e., January 1, 2017 through December 31, 2017).

1.2 Phased Permit Requirements

Ecology began work on the first *Western Washington Phase II Municipal Stormwater Permit* in the fall of 2004 and posted a preliminary draft for public comment February 16, 2005. Ecology released a formal draft of the Permit in February 2006 and issued the final Permit on January 17, 2007, effective February 16, 2007. The permit was modified on June 17, 2009 to implement the outcomes of appeals, and maintained the February 15, 2012 expiration date. Ecology re-issued the permit for one additional year, through July 31, 2013, while developing the current-term permit (2013-2018), which became effective August 1, 2013 and expires on July 31, 2018.

Ecology is phasing in many of the Permit requirements over the five-year Permit term. On March 31 of each permitted year, the City must:

- 1. Submit an annual report documenting Permit compliance activities for the previous calendar year; this report is completed online beginning with the March 31, 2017 report
- 2. Submit a SWMPP to Ecology describing compliance activities planned for the coming year
- 3. Post the SWMPP and annual report on the web

This SWMPP includes the following attachments:

- Appendix A Acronyms and Definitions from the Permit
- Appendix B 2017 Education and Outreach Plan
- Appendix C Local Source Control Partnership, 2013-2015 Biennium Report

The Western Washington Phase II Municipal Stormwater Permit and additional information can be found on Ecology's website:

http://www.ecy.wa.gov/Programs/wq/stormwater/municipal/phaseIIww/wwphiipermit.html.

1.3 Department Responsibilities

The Permit requirements affect departments across the City organization. Implementation of the various tasks and activities required by the permit are handled by the most closely-related City department according to the specific task(s) including; Engineering, Development Services, Public Works, Facilities, and Parks & Recreation. The Stormwater Engineer provides oversight of the Permit and receives direct reports from each responsible City department on related activities and programs. This is accomplished throughout the year, at quarterly meetings, and during annual internal reporting.

1.4 Total Maximum Daily Load (TMDL) Compliance

Stormwater discharges covered under the Permit are required to implement actions necessary to achieve the pollutant reductions called for in applicable TMDLs. Applicable TMDLs are TMDLs which have been approved by the EPA before the issuance date of the permit or which have been approved by the EPA prior to the date the permittee's application is received by Ecology. Information on Ecology's TMDL program is available on Ecology's website at www.ecy.wa.gov/programs/wq/tmdl.

All TMDLs approved by EPA before February 15, 2006, were reviewed by Ecology to determine whether stormwater including municipal stormwater sources were identified in the TMDL. When most of these TMDLs were developed, municipal stormwater was considered a subset of non-point discharges, rather than a permitted discharge. As a result, very few TMDLs statewide contain requirements for municipal stormwater sources. Few TMDLs completed to date have established load allocations or waste load allocations for municipal stormwater discharges covered under the Permit. Ecology is interpreting TMDL requirements as follows:

- For TMDLs where stormwater was not identified as a source of the pollutants of concern, or if all of the sources were defined in the TMDL, Ecology considers the MS4 not to be a significant contributor of pollutants.
- Where stormwater was identified as a source of pollutants and the TMDL or implementation plans developed to support the TMDL identified control measures were less than or equivalent to the requirements of this permit, Ecology sets a narrative effluent limit: "compliance with the permit compliance constitutes compliance with the TMDL."
- If stormwater was identified as a source of pollutants and specific WLAs, LAs or control measures were established, Ecology must develop effluent limits in addition to the other requirements of the permit. These effluent limits may be narrative or numeric depending on the control measures set by the TMDL or implementation plans.

Where a TMDL or the detailed implementation plan developed for the TMDL identifies actions or activities beyond what is required by this permit, Ecology has identified the additional requirements in Appendix 2 of the permit for all TMDLs approved by EPA prior to February 15, 2006. Appendix 2 of the permit lists the cities and counties affected by the one or more TMDLs.

1.5 Document Organization

The content in this document is based upon the Permit requirements, and is organized according to the program components required by section S5.C of the Permit:

- Section 2.0 addresses Permit requirements for administration of the City's Stormwater Management Program for 2017.
- Section 3.0 addresses Permit requirements for Public Education and Outreach for 2017.
- Section 4.0 addresses Permit requirements for Public Involvement and Participation for 2017.
- Section 5.0 addresses Permit requirements for Illicit Discharge Detection and Elimination for 2017.
- Section 6.0 addresses Permit requirements for Controlling Runoff from New Development, Redevelopment and Construction Sites for 2017.
- Section 7.0 addresses Permit requirements for Pollution Prevention and Operation and Maintenance for Municipal Operations for 2017.
- Section 8.0 addresses Permit requirements for Compliance with Total Maximum Daily Load Requirements
- Section 9.0 addresses Permit requirements for Monitoring and Assessment for 2017.

Each section includes a summary of the relevant Permit requirements and a description of current and planned compliance activities.

CITY OF PUYALLUP 2015 STORMWATER MANAGEMENT PROGRAM

2 STORMWATER MANAGEMENT PROGRAM ADMINISTRATION

This Section describes Permit requirements related to overall Stormwater Management Program administration, including current and planned compliance activities.

2.1 Permit Requirements

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

- Develop and implement a Stormwater Management Program and prepare written documentation (SWMPP). The SWMPP shall be updated at least annually for submittal with the annual report to Ecology. The purpose of the Stormwater Management Program is to reduce the discharge of pollutants from the municipal stormwater system to the maximum extent practicable (MEP) while implementing AKART, thereby protecting water quality. The Stormwater Management Program is to include the actions and activities described in Sections 3 through 8 of this SWMPP.
- Submit annual reports beginning in 2013 to Ecology by March 31st (for the previous calendar year). These
 reports are to summarize SWMP implementation status and present information from assessment and
 evaluation activities conducted during the reporting period.

2.2 Current Activities

The City currently has in place activities and programs that meet the Permit requirements. Current activities associated with the above Permit requirements include:

- The City has developed and shall update at least annually, for Public review and input as well as submittal to Ecology, written documentation of the SWMP. The Engineering Department, with the assistance of an internal Steering Committee comprised of staff from Public Works, Development Services, and the Planning Department, leads the City in development of the SWMPP.
- The City has developed and will continue to implement ongoing programs to gather, track, maintain and use information about these programs and activities to evaluate the SWMP development, implementation and permit compliance and to set priorities and plan activities for the future. These programs include systems to track:
 - Cost of development and implementation of the SWMP
 - Number of inspections, enforcement actions and public education activities
- The City currently and will continue to coordinate with other Permittees and well as departments within the City as required by the permit.
- The City is on track to comply with Ecology's requirements for submittal of the Annual Report and SWMPP by March 31, 2017.

2.3 Planned Activities

Puyallup has positioned itself well to maintain compliance as Ecology phases-in the future Permit deadlines. Table 2-1 presents the proposed work plan for the 2017 SWMPP administration activities. These tasks will continue to be refined through an iterative process of interviews and workshops with staff from affected City departments.

Table 2-1. 2014 Stormwater Management Administration Program Work Plan				
Task ID	Task Description	Lead	Schedule Notes	
SWMP-1	Refine and implement NPDES cost accounting strategy for time spent on each component of Permit.	Finance	Ongoing process.	
SWMP-2	Refine and implement training and tracking procedures and systems.	Engineering - Stormwater	Ongoing process	
SWMP-3	Provide new employee IDDE training.	Individual department/HR	Development of PowerPoint training for annual training for annual training for all field personnel.	
SWMP-4	Summarize annual activities for "Stormwater Management Program" component of Annual Report; identify any updates to SWMPP document.	Engineering- Stormwater	The SWMPP and Annual Compliance Report are due on or before March 31st of each year.	

CITY OF PUYALLUP 2015 STORMWATER MANAGEMENT PROGRAM

3 PUBLIC EDUCATION AND OUTREACH

This Section describes the Permit requirements related to Public Education and Outreach, including current and planned compliance activities.

3.1 Permit Requirements

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

- Provide an education and outreach program for the area served by the MS4. The program shall be designed to build general awareness and effect behavior change to select target audiences about the stormwater problem and provide specific actions they can follow to minimize the problem.
- 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 target audience in at least one subject area. No later than February 2, 2016, Permittees shall use the resulting measurements to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors – to be achieved individually or part of a regional group.

3.2 Current Activities

The permit requires the City to choose a target audience for (1) general awareness outreach and (2) to effect behavior change. Table 3.1 below outlines the programs in place and planned to achieve the awareness and behavior change requirements. In many instances, multiple programs support achievement of these requirements. The City's selected target audiences and BMPs are outlined below. The most-relevant program or activity is identified for each item listed:

- To build general awareness the City has elected to outreach to the <u>General Public</u> (including school-age children) on the topics of:
 - General impacts of stormwater on surface waters (Educ 8)
 - Impacts from impervious surfaces (Educ 9)
 - Impacts of illicit discharges and how to report them (Educ 12)
 - Low impact development (LID) principles and LID BMPs (Educ 9)
 - Opportunities to become involved in stewardship activities (Educ 14)
- To effect behavior change, the City has elected to target <u>Residents, Landscapers, and</u> <u>Property Managers/Owners</u> on:
 - Use and storage of pesticides, fertilizers and household chemicals (Educ 12)
 - Carpet cleaning and auto repair and maintenance (Educ 12)
 - Vehicle, equipment and building maintenance (Educ 12)

• Stormwater facility maintenance(Educ 11)

The City's Education and Outreach Program was developed in 2008 and has been updated annually to reflect changes in the program, meet permit requirements, meet the needs of the City, and in 2016, to direct efforts and resources most effectively. The 2017 program is discussed in detail in the '2017 City of Puyallup Stormwater Education and Outreach Plan', found in Appendix B. The plan outlines the outreach activities and programs mentioned thus far this plan, and how the City will implement each program or activity in order to achieve measurable improvements in the various target audiences' understanding of stormwater and ways to improve and protect water quality.

Over the past several years the City's Education and Outreach Programs have grown based on partnerships with regional jurisdictions, non-profit organizations, and the local Conservation District Office. Staff have shared their experiences and lessons-learned with many other permittees, and shaped the direction of these programs based on these lessons. Below is a summary of just some of the programs that will continue into 2017. Table 3.1 below lists all program and activities, and Appendix B of this SWMPP fully details the City's Education and Outreach Program.

- Stormwater Management webpage Continued updating and management of this education and outreach component includes: posting information and documents related to stormwater, listing public service announcements, promoting stormwater education and outreach events, and posting the telephone number for the City's Illicit Discharge Hotline.
- <u>Puyallup's Rain Garden Program</u> During 2014 this program underwent growth while transitioning to the cost-share based program. As a result, the program participation grew to new areas of the City and gained popularity. More permeable pavements were installed on private residences in 2016 than in any single previous year of the program since inception in 2009.
- Educational Flyers/Materials/Promotion through City (non-Stormwater) Outlets. The City strives to include stormwater-related information on the City website, and through social media when possible. Promotion of online monthly stormwater quizzes and giveaway items are often Tweeted or posted on the City's Facebook page.
- <u>Open Space and Stream Restoration Steward Program.</u> Providing education and outreach as well as serving to improve water quality in our local streams: Clarks, Silver and Meeker creeks have been the focus of riparian restoration for the City for several years now. In 2015, this effort became formalized in a Stewardship Program implemented by Pierce Conservation District in partnership with the City. The program trains volunteers on riparian zone maintenance and care and then organizes an 'adoption' of a stream section for management. The program expands as-needed to include new restoration and stewardship sites.

3.3 Local Source Control

The program was launched in 2012 as an outreach program targeting local businesses that provided training and education on the effects of their business practices on the environment. The Local Source Control Program provides one-on-one site visits of business facilities to help operators and managers identify potential environmental risks, hazards, and ways to reduce their waste and exposure to regulatory violations. In 2017, the main focus will remain the Automotive Industry, Gasoline Stations and Property Management Companies. In 2017, the LSC Specialist position will again be back-funded through a Department of Ecology contract grant for 0.7 FTE. This funding currently extends through December 2017 with anticipation of a two-year extension based on performance.

3.4 Planned Activities

The City plans to expand its Education and Outreach program in 2017 through the continued expansion of collaborative partnerships with local organizations and other permittees. These activities include active participation in the regional STORM group partnerships with teachers in various schools in the City, both public and private, and continuing the on-going partnership with the Pierce Conservation District. In addition, the City has recently signed a contract for continued funding from Washington Department of Ecology to continue the Local Source Control Program to the City.

The City had previously adopted and incorporated the 'Puget Sound Starts Here' logo on its catch basin markers and is continuing to integrate the branding on publications where possible, to build on the regional efforts to build a recognizable brand and message across jurisdictions. The City of Puyallup has also worked closely with other jurisdictions when opportunities have presented themselves. The City's active participation in the Puget Sound NPDES Coordinators Group has helped identify some of those opportunities.

Table 3-1 is a work plan that summarizes the anticipated 2017 SWMPP public education and outreach activities including those that will be continued from 2016 and detailing anticipated expansions of the program to include new focus on audiences such as school-age children and businesses.

Table 3-1. 2017 Public Education and Outreach Work Plan				
Task ID	Task Description	Lead	Schedule Notes	
EDUC-1	Implementation of education and outreach plan.	Stormwater Department	See Appendix B for full program details; Note specific projects for 2017 below	
EDUC-2	Measure the understanding and adoption of stormwater BMPs by select target audience.	Stormwater Department	Evaluation of LSC Program BMP implementation rates	
EDUC-3	Summarize annual activities for "Public Education and Outreach" component of Annual Report; identify any updates to SWMPP document.	Stormwater Department	The SWMPP and Annual Report submittal is due on or before March 31st of each year.	
EDUC-4	Volunteer installations of new and replace existing (as needed) storm drain markers in high profile areas of City, e.g. near City facilities, parks and schools.	Stormwater Department, PCD	Installations May-September	
EDUC-5	Stormwater-related posts and Tweets on City's social media accounts	City Management, Stormwater Department	Ongoing 2017	
EDUC-6	Stormwater related stories in PCD publication.	Stormwater Department, PCD	Ongoing 2017	
EDUC-7	Open Space, Stream, and Riparian zone Stewardship Program	Stormwater Department, PCD	Ongoing 2017	
EDUC-8	Outreach to Puyallup School District for stormwater educational calendar project	Stormwater Department	Ongoing 2017	

Table 3-1. 2017 Public Education and Outreach Work Plan				
Task ID	Task Description	Lead	Schedule Notes	
EDUC-9	Puyallup's Rain Garden Program	Stormwater Department, PCD	Ongoing 2017	
EDUC-10	Streamside Planting Program	Stormwater Department, PCD	Ongoing 2017	
EDUC-11	Provide education and information for private storm system owners on maintenance and reporting program (Rain Garden recipients and 2005- SWMMWW-permitted facilities).	Stormwater Department	Ongoing 2017	
EDUC-12	Refine and continue IDDE education to public, employees, businesses and general public outreach program, solicit feedback, and produce report	LSC, Stormwater Department	Ongoing 2017	
EDUC-13	Utilize various media to promote the stormwater message and program	City Management, Planning, Stormwater Department	Ongoing 2017	
EDUC-14	Update City Manager's brief monthly as needed. This also includes posting updated materials on website in relation to the education and outreach work plan.	Stormwater Engineer	Ongoing 2017	
EDUC-15	Involve City staff in stormwater education and promotional events	Stormwater Department	Ongoing 2017	
EDUC-16	Track types of public education and outreach activities implemented, # of activities implemented	Stormwater Department	Ongoing 2017	

CITY OF PUYALLUP 2017 STORMWATER MANAGEMENT PROGRAM

4 PUBLIC INVOLVEMENT

This Section describes the Permit requirements related to Public Involvement, including current and planned compliance activities.

4.1 Permit Requirements

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

- Provide ongoing opportunities for public involvement through advisory boards and commissions, watershed committees, public participation in developing rate structures and budgets, stewardship programs, environmental activities or other similar activities. The public must be able to participate in the decision-making processes involving the development, implementation and update of the Stormwater Management Program.
- Make the SWMPP and Annual Report available to the public, including posting on the City's website. Make other documents required to be submitted to Ecology in response to Permit conditions available to the public.

4.2 Current Activities

The current compliance activities associated with the above Permit requirements include:

- The City implemented public involvement activities intended to meet the Permit requirements in development of its update to the SWMPP. The draft SWMPP was made available on the City's website for comment.
- The City defined its process for annual SWMPP updates, publication on the website soliciting public input.
- The City posted the Draft 2017 SWMPP and the 2016 Annual Report on the City website.

4.3 Planned Activities

Puyallup will offer the public opportunities to be involved in the decision making process on stormwater issues. Actions recommended for continued compliance include:

- Make most-current SWMPP and Annual Report available to public by posting on the City website.
- The City summarizes associated activities in its Annual Report by March 31st, of each year
- The City has completed a Stormwater Comprehensive Plan update in 2011. It was made available to the public via workshops and public hearings.
- The City has an ongoing practice of inviting public participation and input to proposed restoration projects, specifically when located in residential areas to gain interest and investment in the projects. Recently-completed projects such as these included the Ecology grant-funded Meeker Creek Restoration project.

Table 4-1 is the work plan for 2017 SWMP public involvement activities. These tasks will be refined through an iterative process of interviews and workshops with staff from affected City departments.

Table 4-1. 2017 Public Involvement Work Plan				
Task ID	Task Description	Lead	Schedule Notes	
PI-1	Provide public involvement opportunities for annual SWMPP update.	Stormwater Engineer	Public involvement opportunities will be available before and after 3/31/2017 submittal.	
PI-2	Make SWMPP and Annual Report available to public by posting on the City website.	Stormwater Engineer		
PI-3	Summarize annual activities for "Public Involvement and Participation" component of Annual Report; identify any updates to SWMPP document.	Stormwater Engineer	The SWMPP and Annual Report submittal is due on or before March 31st of each year.	

CITY OF PUYALLUP 2017 STORMWATER MANAGEMENT PROGRAM

5 ILLICIT DISCHARGE DETECTION AND ELIMINATION

This Section describes the Permit requirements related to Illicit Discharge Detection and Elimination (IDDE), including current and planned compliance activities.

5.1 Permit Requirements

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

- On an on-going basis, periodically update mapping of the MS4. No later than February 2, 2018 update maps to include minimum requirements listed in S5.C.3.a i through vii.
- Maintain an ongoing program to <u>detect and remove</u> illicit discharges, connections and improper disposal, including any spills into the municipal separate storm sewers owned or operated by the City. An illicit discharge means "any discharge to a municipal storm system that is not composed entirely of stormwater..." and illicit connection means "any man-made conveyance that is connected to a municipal storm system without a permit (excluding roof drains and other similar type connections) such as sanitary sewer connections, floor drains, etc."
- Implement an ordinance that prohibits non-stormwater, illicit discharges into the MS4 considering allowable discharges, conditionally-allowable discharges, discharges that present a significant source of pollutants. The ordinance shall include escalating enforcement, and compliance strategies revised to meet these requirement no later than February 2, 2018.
- Implement an ongoing program to <u>detect and identify</u> non-stormwater discharges and illicit connections into MS4. Program shall include a field screening methodology. Screening shall be completed on 40% of the MS4 no later than December 31, 2017 and 12% each year thereafter.
- Implement an ongoing program to <u>address</u> illicit discharges, including spills and illicit connections, into the MS4. Program shall include elements listed in S5.C.3.d.
- Publicize and maintain a spill hotline.
- Train IDDE staff on implementation of IDDE program and maintain training records.
- Inform other staff, public, and businesses on hazards of illicit discharges and improper disposal of waste.
- Track and maintain records of activities conducted to meet the requirements of S5.C.3 (summarized above).

5.2 Current Activities

The City currently implements activities and programs that meet the Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The City is a subscriber to Pierce County's geographic information system (GIS) in which the City updates data reflecting existing layout and configuration of the MS4 on an on-going basis.
- The City currently has an active, on-going IDDE program to detect, identify, address and remove illicit discharges including a field screening methodology.
- City code adopted in August 2009 specifies IDDE program and enforcement provisions.

- The City has an emergency phone number posted on the City's website that allows citizens to report illicit discharges or illicit dumping.
- IDDE staff were trained in First Responder training in August 2009. Updates and training on manual revisions and changes have been done on an on-going basis
- The City summarizes associated activities in its Annual Report by March 31^{st,} of each year.

5.3 Planned Activities

Puyallup plans to expand current illicit discharge detection and elimination program efforts in order to meet field screening activity requirements by December 31, 2017 and maintain existing IDDE program-related activities. Table 5-1 details the work plan for 2017 SWMP Illicit Discharge Detection and Elimination (IDDE) activities. These tasks will be refined through an iterative process of interviews and workshops with staff from affected City departments.

	Table 5-1. 2017 Illicit Discharge Detection and Elimination Work Plan				
Task ID	Task Description	Lead	Schedule Notes		
IDDE-1	Maintain on-going IDDE Program.	Public Works Collections, Stormwater Engineering	Ongoing		
IDDE-2	Maintain and update, as needed, current GIS stormwater layer to include annexed areas and new infrastructure	Public Works Collections	Ongoing		
IDDE-3	Continue to review and revise IDDE response process as needed to ensure City-wide IDDE response and enforcement process and procedures are adequate.	Public Works, Legal, Stormwater Engineering	Ongoing		
IDDE-4	Train municipal field staff on the identification, investigation, termination, cleanup, and reporting of illicit discharges, improper disposal and illicit connections.	Public Works O&M, Stormwater Engineering	Train all employees annually as part of an ongoing training process		
IDDE-5	Maintain on-going Local Source Control Program including public outreach and education on illicit discharges and identification and removal of illicit discharges within commercial business properties	Stormwater Engineering	ongoing		
IDDE-6	Summarize annual activities for "Illicit Discharge Detection and Elimination" component of Annual Report; identify any updates to SWMPP document.	Public Works Collections	The SWMPP and Annual Report submittal is due on or before March 31st of each year.		
IDDE-7	Track number of hotline calls and number of follow-up actions taken during the year	Public Works Collections, Stormwater Engineering	Ongoing		
IDDE-8	Maintain visibility and frequency of appearance of hot line number on web site	City Management, Stormwater Engineering	Ongoing		
IDDE-9	Develop procedures for locating priority areas likely to have illicit discharges, including: evaluating land uses and business/industrial activities present; areas where complaints have been registered in the past; and areas with storage of large quantities of materials that could result in illicit discharges, including spills.	Public Works Collections, Stormwater Engineering	Ongoing		

	Table 5-1. 2017 Illicit Discharge Detection and Elimination Work Plan				
Task ID	Task Description	Lead	Schedule Notes		
IDDE-10	Track the number of illicit discharges, including spills.	Public Works Collections	Ongoing		
IDDE-11	Track number of inspections for Illicit Connections	Public Works Collections	Ongoing		
IDDE-12	Develop a field screening methodology and complete screening of 40% of MS4	Public Works Collections	Due by December 31, 2017		

(this page intentionally left blank)

CITY OF PUYALLUP 2017 STORMWATER MANAGEMENT PROGRAM

6 CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT AND CONSTRUCTION SITES

This Section describes the Permit requirements related to Controlling Runoff from New Development, Redevelopment and Construction Sites, including current and planned compliance activities.

6.1 Permit Requirements

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

- Develop, implement, and enforce a program to reduce pollutants in stormwater runoff to the municipal separate storm sewer system from new development, redevelopment and construction site activities. The program must apply to both **private and public projects**, including roads.
- Adopt regulations (codes and standards) and implement <u>plan review</u>, inspection, and escalating <u>enforcement processes</u> and procedures necessary to implement the program in accordance with Permit conditions, including the minimum technical requirements in Appendix 1 of the Permit (i.e., 2012 Ecology Stormwater Management Manual for Western Washington) by December 31, 2016.
- Enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.
- Review, revise and make effective local development-related codes, rules, standard and other enforceable documents to incorporate and require LID principles and LID BMPs by December 31, 2016.
- Develop and implement a program with provisions to verify adequate long-term operations and maintenance of treatment and flow-control BMPs and facilities constructed pursuant to Section S5.C of the Permit by December 31, 2016. The provisions shall include an enforceable mechanism and enforcement procedures. Eighty present of all such facilities as well as those permitted since adopted requirements of the 2007-2012 permit must be inspected on an annual basis by this date
- Provide training to staff on the new codes, standards, processes and procedures and create public outreach and education materials.
- If located within a watershed selected by a Phase 1 Permittee, fully participated in the watershed-scale stormwater planning as described in S5.C.5.g.

6.2 Current Activities

The City currently has activities and programs that meet the Permit requirements. Current compliance activities associated with the above Permit requirements include:

- The City has developed and implemented a program to reduce pollutants in stormwater runoff to the municipal separate storm sewer system from some development and construction site activities. The City enforces this program through the Civil Code.
- The City requires submittal of Erosion and Sediment Control (ESC) plans and stormwater management plans (i.e., for post-construction, permanent site drainage, and water quality facilities).

- The City conducts construction and stormwater site inspections during the pre-construction and construction phases.
- The City provides copies of Notices of Intent (NOI) for construction and industrial activities during the permit review process with developers.
- The City summarizes associated activities in its Annual Report by March 31^{st,} of each year.
- The City is currently developing training for staff on new codes, standards and processes related to current Permit-required code changes related to stormwater management.
- The City is revising the program to track, inspect, and verify long-term operations and maintenance of treatment and flow-control BMPs and facilities constructed since February 10, 2010 including provisions for annual inspections, record keeping, warning letters, notices of violations and other enforcement actions.
- The City is located entirely within Pierce County. Pierce County, as a Phase I NPDES Municipal Stormwater Permittee, did not select a watershed of which the City is partially or entirely within for watershed-scale stormwater planning; thus, no action required for S5.C.4g.

6.3 Planned Activities

Puyallup has a program to help reduce stormwater runoff from new development and construction sites and is currently updating the program to maintain compliance per new Ecology-directed Permit requirements. Table 6-1 is the work plan for 2017 SWMP activities related to control of runoff from new development, redevelopment and construction sites. These tasks will be refined through an iterative process of interviews and workshops with staff from affected City departments.

Table 6-1. 2017 Controlling Runoff from Development, Redevelopment, and Construction Sites Work Plan					
Task ID	Task Description	Lead	Schedule Notes		
CTRL-1	Adopt 2012 DOE Stormwater manual.	Engineering, Legal	By December 31, 2016		
CTRL-2	Revise code language, rules and standards for managing stormwater runoff from development, redevelopment, and construction sites that includes requirements for use of LID.	Engineering, Legal	By December 31, 2016.		
CTRL-3	Revise permitting process SOPs to implement new LID-related code.	Engineering	By December 31, 2016, ongoing.		
CTRL-4	Continue on-going management of project record- keeping system for permitting, plan review, construction site inspections, and enforcement actions.	Engineering	Ongoing		
CTRL-5	Train staff responsible for implementing the revised program to control runoff from new development, redevelopment, and construction sites.	Engineering	By December 31, 2016, ongoing		
CTRL-6	Summarize annual activities for "Controlling Runoff from New Development, Redevelopment, and Construction Sites" component of Annual Report; identify any updates to SWMPP.	Engineering,	The SWMPP and Annual Report submittal is due on or before March 31st of each year.		

Table 6-1. 2017 Controlling Runoff from Development, Redevelopment, and Construction Sites Work Plan				
Task ID	Task Description	Lead	Schedule Notes	
CTRL-7	Conduct Stormwater Site Plan reviews for new development and redevelopment projects to ensure plans meet minimum requirements of SWMMWW Appendix 1 for permits applications received January 1, 2017 or later, or those permitted prior to this date and not started construction by January 1, 2022.	Engineering	December 31, 2016, ongoing	
CTRL-8	Inspect construction phase stormwater controls at permitted sites to verify proper installation and maintenance of erosion and sediment controls, track number of sites inspected during the year and any enforcement actions taken.	Engineering	Ongoing	
CTRL-9	Inspect permitted development sites upon completion and prior to final approval or occupancy to ensure proper installation of permanent stormwater controls, enforce regulations as-needed, and track number of sites and number of sites inspected.	Engineering	Ongoing	
CTRL-10	Verify a maintenance plan is completed and responsibility for maintenance is assigned.	Engineering	Ongoing	
CRTL-11	Provide copies of the Notice of Intent for Construction Activity and Notice of Intent for Industrial Activity to representatives of proposed new development and redevelopment (private development) or submit to Ecology (public development)	Engineering	Ongoing	
CRTL-12	Revise annual private facility O&M inspection program to include inspection of catch basins	Stormwater Engineering	December 31, 2016	
CRTL-13	Implement current and revised (by 12/31/2106) annual O&M inspection program including record keeping and enforcement.	Stormwater Engineering	Ongoing	
CRTL-14	Achieve 80% completion of schedule private stormwater facility inspections, including catch basins	Stormwater Engineering	June 30, 2018	

(this page intentionally left blank)

CITY OF PUYALLUP 2017 STORMWATER MANAGEMENT PROGRAM

7 POLLUTION PREVENTION AND OPERATION AND MAINTENANCE FOR MUNICIPAL OPERATIONS

This Section describes the Permit requirements related to Pollution Prevention and Operation and Maintenance for Municipal Operations, including current and planned compliance activities.

7.1 Permit Requirements

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

- Develop and implement an operations and maintenance (O&M) program, including a training component, with the ultimate goal of preventing or reducing pollutant runoff from the municipal separate stormwater system and municipal operations.
- Establish maintenance standards for the municipal separate stormwater system (MS4) that are at least as protective as those specified in the 2012 *Stormwater Management Manual for Western Washington* by December 31, 2016.
- Perform inspection of stormwater flow control and treatment facilities and catch basins at the required frequencies, unless previous inspection data show that a reduced frequency is justified.
- Perform maintenance within 1 year (6 months for catch basins and within 2 years if maintenance requires capital construction costs of less than \$25,000) when an inspection identifies the need
- Spot check permanent stormwater facilities after major storm events and inspect all stormwater treatment and flow control BMPs/facilities that may be affected if spot checks indicated widespread damage or maintenance needs.
- Complete 95% of all scheduled permanent stormwater facility inspection and catch basin inspections and spot checks by December 31, 2016
- Implement practices, policies and procedures to reduce stormwater impacts associated with runoff from municipal operation and maintenance activities for streets, parking lots, roads or highways owned or maintained by the City, and to reduce pollutants in discharges from all lands owned or maintained by the City including those activities specifically noted in section f of S5.C.5.
- Train staff to implement the practices, policies and procedures to reduce stormwater impacts, as described in the relevant SWPPP for each facility. Document any such training and provide follow-up trainings as needed.
- Implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the City including: Corporate Yards, Parks Maintenance Facility, and Water Pollution Control Plant.
- Perform periodic visual observation of discharges from the above-listed facilities to evaluate the effectiveness of the BMPs implemented. Document these observation requirements in the corresponding SWPPP.
- Maintain records of inspections and maintenance or repair activities required in this section.

7.2 Current Activities

The City currently has activities and programs that meet the Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The City has a program that aims to prevent and reduce runoff from the MS4 and municipal operations.
- The City has a program for catch basin and inlet inspections.
- The City's catch basin, culvert, ditch and pipe cleaning operations implement practices, policies and procedures that reduce stormwater impacts from runoff.
- The City has a regular street sweeping program.
- The City's road repair, roadside maintenance, snow removal, pavement striping and grinding activities implement practices, policies and procedures that reduce stormwater impacts from runoff.
- The City's open space maintenance landscaping practices implement practices, policies and procedures that reduce stormwater impacts from runoff.
- The City has a pet waste management and crash collection program that implements practices, policies and procedures that reduce stormwater impacts from runoff.
- The City's utility installation activities implement practices, policies and procedures that reduce stormwater impacts from runoff.
- The City spot checks stormwater facilities after major storm events.
- The City's building cleaning and maintenance activities implement practices, policies and procedures that reduce stormwater impacts from runoff.
- The City has Stormwater Pollution Prevention Plans (SWPPP) for all municipal facilities including Corporate Yards, Wastewater Treatment Plant, and Parks Maintenance Facility and performs periodic visual inspections to evaluate the effectiveness of each SWPPP.
- The fueling island stormwater retrofit, identified in the Corporate Yards SWPPP was completed in early 2016.
- The City has a training program that covers all practices, policies and procedures identified above.

7.3 Planned Actions

Puyallup performs activities to limit stormwater pollution potential related to its municipal operations and maintenance program. Activities will be revised and new activities implemented to remain in compliance with new permit requirements as they become due. Table 7-1 is the work plan for 2017 SWMP activities related to pollution prevention and operations and maintenance activities. These tasks were developed through an iterative process of interviews and workshops with staff from affected City departments.

	Table 7-1. 2017 Pollution Prevention and Operations and Maintenance Work Plan			
Task ID	Task Description	Responsible	Schedule Notes	
PPOM-1	Update municipal storm system inspection and operations and maintenance processes and procedures to be commensurate with the 2012 Stormwater Manual maintenance standards.	Public Works Collections, Stormwater Engineering	By December 31, 2016	
PPOM-2	Inspect 95% of all flow control, treatment facilities and catch basins	Public Works Collections	By December 31, 2016, ongoing	
PPOM-3	Perform maintenance identified during inspection activities within the prescribed time limitations	Public Works Collections	Ongoing	
PPOM-4	Conduct spot checks of stormwater facilities after major storms	Public Works Collections	Ongoing	
PPOM-5	Implement street sweeping program	Public Works	Ongoing	
PPOM-6	Implement practices, policies and procedures to reduce stormwater impacts from runoff for all activities conducted on streets, parking lots, roads, building areas, parks, open space, maintenance yards, and stormwater treatment and flow control BMPs/facilities	Public Works, Parks	Ongoing	
PPOM-7	Implement Stormwater Pollution Prevention Plan (SWPPP) for Corporate Yards, Waste Water Treatment Plant and Parks Maintenance Facilities.	Public Works, Parks	Ongoing	
PPOM-8	Perform periodic visual inspections to evaluate effectiveness of SWPPP	Public Works, Parks	Periodic	
PPOM-9	Conduct review training for O&M staff on practices, policies, and procedures to reduce stormwater impacts from runoff and document trainings	Stormwater Engineering	Ongoing, as-needed	
PPOM-10	Track number of catch basins inspected and number cleaned for reporting period	Public Works Collections	Ongoing	
PPOM-11	Train staff on Operations and Maintenance procedures contained in Regional Road Maintenance ESA Program Guidelines, track number of trainings	Engineering	2017	
PPOM-12	Install a material storage shed to cover loose rock, sand and gravel materials at the Corporate Yards	Engineering	By October 2018	
PPOM-13	Design and construct a Decant Facility at the Corporate Yards.	Engineering	By October 2018	

Table 7-1. 2017 Pollution Prevention and Operations and Maintenance Work Plan					
Task ID	Task Description	Responsible	Schedule Notes		
PPOM-14	Summarize annual activities for "Pollution Prevention and Operation and Maintenance" component of Annual Report; identify any updates to SWMPP.	Public Works, Public Works Collections	The SWMPP and Annual Report submittal is due on or before March 31st of each year.		

CITY OF PUYALLUP 2017 STORMWATER MANAGEMENT PROGRAM

8 COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

This Section describes the Permit requirements related to Total Maximum Daily Load (TMDL) Requirements, including current and planned activities.

8.1 Permit Requirements

This Permit section (Section S8) applies only to municipalities where an applicable TMDL is approved for stormwater discharges from the MS4. There are two applicable TMDLs listed in Appendix 2 of the Phase 2 permit including:

- WRIA 10 Puyallup River
- WRIA 10 Clarks Creek (Fecal Coliform)

Compliance with this permit constitutes compliance with TMDLs not listed in Appendix 2, and issued after the effective date of the permit and not incorporated into Appendix 2 by permit modification at this time include:

WRIA 10 - Clarks Creek, Meeker Creek (Dissolved Oxygen, Sediment)

8.2 Current Activities

The City is currently implementing activities requirement for compliance with the above listed TMDLs including:

- Identifying areas discharging via the MS4 to Deer Creek as high priority areas for IDDE field screening, with focus during the dry weather season (May-September).
- Areas of the MS4 discharging to Deer Creek are managed per the IDDE program as detailed in Section 5 of this document.
- Identifying areas discharging via the MS4 to Meeker Creek as high priority areas for IDDE field screening, with focus during the dry weather season (May-September).
- Areas of the MS4 discharging to Meeker Creek are managed per the IDDE program as detailed in Section 5 of this document.

8.3 Planned Activities

Table 8-1. TMDL Plan Implementation Activities					
Task ID	Task Description	Lead	Schedule Notes		
TMDL -1	Complete field screening in areas of the MS4 that discharge to Deer Creek	Public Works Collections	Ongoing		
TMDL-2	Manage MS4 areas discharging to Deer Creek per the IDDE program	Public Works Collections	Ongoing		
TMDL -3	Complete field screening in areas of the MS4 that discharge to Meeker Creek	Public Works Collections	Ongoing		
TMDL-4	Manage MS4 areas discharging to Meeker Creek per the IDDE program	Public Works Collections	Ongoing		

9 MONITORING AND ASSESSMENT

This Section describes the Permit requirements related to Monitoring and Assessment, including current and planned activities.

9.1 Permit Requirements

The Permit (Section S8) requires municipalities to conduct water quality monitoring and perform assessments during this Permit term, including:

- Provide a description of any stormwater monitoring or stormwater-related studies conducted by the City during the reporting period. If stormwater monitoring was conducted on behalf of the City, or if studies or investigations conducted by other entities were reported to the City, a brief description of the type of information gathered or received shall be included in the Annual Report. This does not include any monitoring, studies, or analysis related to the RSMP unless conducts independently per S8.B or S8.C.
- Notify Ecology in writing by December 1, 2013 of the Status and Trends Monitoring Option (#1 or #2) the City chooses to carry out.
- Notify Ecology in writing by December 1, 2013 of the Effectiveness Studies Option (#1 or #2) the City chooses to carry out.
- Pay into a collective fund to implement the RSMP Source Identification Information Repository (SIDIR) beginning in August, 2014.

9.2 Current Activities

The City currently has activities and programs that meet the Permit requirements. Current compliance activities associated with the above Permit requirements include:

- Notification to Ecology of selected monitoring and assessment options.
- Annual payment for RSMP implementation fund.

9.3 Planned Activities

Beginning in the current permit term (August 2013 through July 2018), the City will begin to participate in Ecology's monitoring and assessment program. The program requires each jurisdiction to pay a specific monetary amount in order to address a specific element that needs to be addressed as a part of the NPDES. These include Status and Trends, Effectiveness, and Source Identification. Table 9-1 presents the work plan for 2017 SWMP monitoring activities.

Table 9-1. 2017 Monitoring and Assessment Activities						
Task ID	Task Description	Lead	Schedule Notes			
MNTR -1	Pay Ecology's specified fees for RSWMP implementation	Stormwater Engineering	Ongoing			
MNTR-2	Select Status and Trends option	Stormwater Engineering	Completed October 2013			
MNTR-3	Select Effectiveness Study option	Stormwater Engineering	Completed October 2013			

APPENDIX A

Acronyms and Definitions

This page left intentionally blank

The following definitions and acronyms are taken directly from the Phase II Permit and are reproduced here for the reader's convenience.

AKART means all known, available, and reasonable methods of prevention, control and treatment. **All known, available and reasonable methods of prevention, control and treatment** refers to the State Water Pollution Control Act, Chapter 90.48.010 and 90.48.520 RCW.

Basin Plan is a surface water management process consisting of three parts: a scientific study of the basin's drainage features and their quality; developing actions and recommendations for resolving any deficiencies discovered during the study; and implementing the recommendations, followed by monitoring.

Best Management Practices ("BMPs") are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by the Department that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

BMP means Best Management Practice.

Component or **Program Component** means an element of the Stormwater Management Program listed in S5 Stormwater Management Program for Cities, Towns, and Counties or S6 Stormwater Management Program for Secondary Permittees of this permit.

CWA means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

Discharge for the purpose of this permit means, unless indicated otherwise, any discharge from a MS4 owned or operated by the permittee.

Ecology's Western Washington Phase I Municipal Stormwater Permit regulates discharges from municipal separate storm sewers owned or operated by Clark, King, Pierce and Snohomish Counties, and the cities of Seattle and Tacoma.

Ecology's Western Washington Phase II Municipal Stormwater Permit covers certain "small" municipal separate stormwater sewer systems.

Entity means another governmental body, or public or private organization, such as another permittee, a conservation district, or volunteer organization.

Equivalent document means a technical stormwater management manual developed by a state agency, local government or other entity that includes the Minimum Technical Requirements in Appendix 1 of this Permit. The Department may conditionally approve manuals that do not include the Minimum Technical Requirements in Appendix 1; in general, the Best Management Practices (BMPs) included in those documents may be applied at new development and redevelopment sites, but the Minimum Technical Requirements in Appendix 1 must still be met.

Heavy equipment maintenance or storage yard means an uncovered area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are washed or maintained, or where at least five pieces of heavy equipment are stored.

Illicit connection means any man-made conveyance that is connected to a municipal separate storm sewer without a permit, excluding roof drains and other similar type connections. Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system.

Illicit discharge means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from firefighting activities.

IDDE- Illicit discharge detection and elimination

Low Impact Development (LID) means a stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic pre-development hydrologic functions.

Major Municipal Separate Storm Sewer Outfall means a municipal separate storm sewer outfall from a single pipe with an inside diameter of 36 inches or more, or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 12 acres or more).

Material Storage Facilities means an uncovered area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.

Maximum Extent Practicable (MEP) refers to paragraph 402(p)(3)(B)(iii) of the federal Clean Water Act which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.

MEP means Maximum Extent Practicable.

MTRs means Minimum Technical Requirements.

Municipal Separate Storm Sewer System (MS4) means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(i) owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over

disposal of wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.

(ii) Designed or used for collecting or conveying stormwater.

(iii) Which is not a combined sewer; and (iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

Notice of Intent (NOI) means the application for, or a request for coverage under this General Permit pursuant to WAC 173-226-200.

Outfall means point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the State and does not include open conveyances connecting two municipal separate storm sewer systems, or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.

O&M- Operations and Maintenance

Permittee unless otherwise noted, the term "Permittee" includes Permittee, Co-Permittee, and Secondary Permittee, as defined below:

(i) A "Permittee" is a city, town, or county owning or operating a regulated small MS4 applying and receiving a permit as a single entity.

(ii) A "Co-Permittee" is any operator of a regulated small MS4 that is applying jointly with another applicant for coverage under this Permit. Co-Permittees own or operate a regulated small MS4 located within or adjacent to another regulated small MS4.

(iii) A "Secondary Permittee" is an operator of regulated small MS4 that is not a city, town or county.

Small Municipal Separate Storm Sewer System or Small MS4 is a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels and/or storm drains which is:

a. Owned or operated by a city, town, county, district, association or other public body created pursuant to State law having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer districts, flood control districts or drainage districts, or similar entity.

b. Designed or used for collecting or conveying stormwater.

c. Not a combined sewer system,

d. Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

e. Not defined as "large" or "medium" pursuant to 40 CFR 122.26(b)(4) & (7) or designated under 40 CFR 122.26 (a)(1)(v).

Small MS4s include systems similar to separate storm sewer systems in municipalities such as: universities, large publicly owned hospitals, prison complexes, highways and other thoroughfares. Storm sewer systems in very discrete areas such as individual buildings do not require coverage under this Permit.

Small MS4s do *not* include storm drain systems operated by non-governmental entities such as: individual buildings, private schools, private colleges, private universities, and industrial and commercial entities.

Stormwater means runoff during and following precipitation and snowmelt events, including surface runoff and drainage.

Stormwater Associated with Industrial and Construction Activity means the discharge from any conveyance which is used for collecting and conveying stormwater, which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant, or associated with clearing grading and/or excavation, and is required to have an NPDES permit in accordance with 40 CFR 122.26.

Stormwater Management Manual for Western Washington means the 5-volume technical manual (Publication Nos. 99-11 through 15 for the 2001 version and Publication Nos. 05-10-029-033 for the 2005 version (The 2005 version replaces the 2001 version) prepared by Ecology for use by local governments that contains BMPs to prevent, control, or treat pollution in storm water.

Stormwater Management Program (SWMP) means a set of actions and activities designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable and to protect water quality, and comprising the components listed in S5 or S6 of this Permit and any additional actions necessary to meet the requirements of applicable

Vehicle Maintenance or Storage Facility means an uncovered area where any vehicles are regularly washed or maintained, or where at least 10 vehicles are stored.

APPENDIX B

2017 City of Puyallup Stormwater Education and Outreach Plan

This page left intentionally blank

2017 City of Puyallup Stormwater Education and Outreach Plan

Summary

The Education and Outreach (E&O) Plan provides an overview of the activities intended for the 2017 calendar year to meet requirements set forth in the NPDES Phase II Municipal Stormwater General Permit (MSWGP) for Education and Outreach (E&O), Special Requirement S3. Programs and activities will be implemented, expanded, or added to based on available funding, grants and staffing levels, with all minimum requirements of the MSWGP being met.

Overview

Based on the options presented in the 2013-2018 NPDES MSWGP, Puyallup has made the following selections for outreach groups and topics to meet the S5.C.1 requirements for Public Education and Outreach:

- a. Create an education and outreach program to educate target audiences about the stormwater problem and actions to minimize the problem:
 - i. To build general awareness: general public (including school age children) and businesses (including home-based and mobile businesses) on:
 - General impacts of stormwater on surface waters
 - Impacts from impervious surfaces
 - Impacts of illicit discharges and how to report them
 - Low impact development (LID) principles and LID BMPs
 - Opportunities to become involved in stewardship activities
 - ii. To effect behavior change: general public (which may include school age children), businesses (including homebased and mobile businesses)
 - Use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials
 - Equipment maintenance
 - Prevention of illicit discharges

The **Outreach Plans** section of this document describes how the above objectives will be reached through various programs and projects planned for 2017. These programs will each offer opportunities for residents, businesses, and other interested parties to take action to support improvements to and protection of water ways. These efforts will also support the City in addressing the next permit requirement of this section:

b. Creating stewardship opportunities to encourage residents to participate in activities

The **Analysis** section of this document includes discussion and plans to address the remaining S5.C.1 requirement:

c. Measure the understanding and adoption of one target audience in one subject area listed above

The plan is organized by the two target audiences selected: General Public and Business. This division of efforts relates to division of work among current staff and departmental structure within the City. Where possible, efforts are combined to realize benefits of leveraging efforts and funding sources. The Outreach Plans detailed below include individual projects and programs designed to deliver stormwater pollution prevention and water quality

improvement messages to the relevant audience(s). Each Plan is designed and implemented as a living document, allowing for program/project changes to meet the available funding, staffing levels and audience needs.

Outreach Plans

General Public-Directed Outreach Programs

Puyallup's Rain Garden Program

This program will continue into its 10th year in 2017. Despite the nine-year foundation of successful projects within the City, this program will not be funded in the Stormwater Budget for 2017. However, during year-end balancing of Stormwater project budgets, applicable rollover funding will be sought to fund the program. Previously-dedicated Stormwater Capacity Grant funding from Ecology was reversed, which would have otherwise funded the program into 2017. Coordination with Pierce Conservation District (PCD) will continue. This partnership allows the program to leverage City staff expertise and funding with PCD's plant expertise.

The 2017 program focuses on promotion of the program and streamlining of the process to encourage more applicants. The program will continue to promote active homeowner involvement in the design, building, and on-going maintenance of rain gardens, permeable pavements, and rain barrels on private properties.

City involvement in this program and support to citizen participants includes design guidance, training, and costshare for construction.. The program as a whole includes various green stormwater elements including::

- Rain gardens
- Permeable pavements
- Rain barrels
- Riparian planting

Riparian/Streamside Plantings

This program promotes planting of streamside properties in the Clarks Creek basin (along Meeker, Silver, and Clarks creeks) and has grown over the past three years of implementation with a total of 22 participating streamside homes. This program is funded in through the Capacity grant funding from Ecology.

Participating homeowners receive design assistance, coordination of volunteers for installation efforts, and free plants – the average dollar amount per participating property is \$250. The amount varies based on the linear footage of the creek frontage and potential impact to the creek and support to water quality improvements.

In 2017 this program will be promoted jointly with the City's new Neighborwoods Program, managed by the Planning and Permitting Section to promote green cover within the City in support of the Tree City USA Program.

Porous Alley Initiative

In consideration of reducing overall maintenance requirements for capital infrastructure, this program seeks to replace existing compact gravel alleys throughout the City with Porous Asphalt and/or Porous Gravel section. In addition to rollover funding from the 2015 budget, this program is support Puyallup's Street Department who performs the replacement/retrofit work as part of regularly-scheduled maintenance.

Again, alleys in the Clarks Creek basin received first consideration in support of existing TMDL requirements. In addition, alleyways that currently required above-average maintenance will receive higher prioritization.

Stormwater Pollution Prevention Artwork Contest/Calendar Program

The Stormwater Calendar Program, initiated in 2012, provides direct education to school-age children on stormwater and pollution prevention. As part of the program, Stormwater staff visit schools within the district to provide stormwater-centric lessons. After the lesson, students draw a picture that depicts a stormwater pollution-prevention BMP such as building a rain garden or using a commercial car wash. Each year the top 12 drawings are selected to create a Stormwater Calendar. The calendars are distributed around the City and promote stormwater-friendly activities and offer a call-to-action for citizens to learn carry out stormwater pollution prevention activities in exchange for incentives such as car wash coupons, reusable shopping bags, or pet waste bag dispensers.

Business-Directed Outreach Plans

Local Source Control Program

Funding through an interagency agreement with Ecology, the City has tailored and will implement the Local Source Control (LSC) Program in partnership with Ecology and in collaboration with other regional LSC Programs as well as supporting local organizations including WSU-Puyallup and the Washington Stormwater Center.

This program will provide a focused educational program for local businesses, specifically small quantity generators of dangerous waste, to identify sources of pollution on business sites and adopt and implement good housekeeping BMPs. The main focus of our LSC program in 2017 will be property management companies and to complete the current focus of gasoline stations and auto repair facilities.

This program is working hand-in-hand with the Fish Friendly Car Wash Program and the Private Catch Basin Marking Program to bring awareness not only to business owners but also to the general public.

Fish Friendly Car Wash Program

Implemented as a local-concern focus of the LSC Specialist and program, the City has developed the Fish Friendly Car Wash (FFCW) Program to include cooperation with local businesses to serve as points-of-presence and destinations for hosting community FFCW events. Our LSC Specialist will also reach out to the Schools and churches in the area to ensure they are aware of the program and will utilize the kits when fundraising.

The program is used to not only prevent stormwater runoff pollution from car wash activities – such as fundraising events – but also to educate the public on the effects of soap and other pollutants when they enter the stormwater system as well as ways to prevent this pollution.

Private Catch Basin Marking

To expand the reach and influence of the *Only Rain Down the Drain* catch basin marker program, the City will expand the program to include marking of storm drains on private property including areas such as the Puyallup Fair Grounds, South Hill Mall, and other businesses with significant visibility and foot traffic. The City will consult with business owners during site visits with in the LSC program to obtain permissions to mark the drains on private property.

Illicit Discharge, Detection, and Elimination (IDDE) Program

Dissemination of IDDE awareness and education will again be a focus to the City's outreach and education program as part of other existing efforts.

In addition, the IDDE message will be highlighted as part of the Local Source Control (LSC) Program to deliver the message directly to local businesses. This program will also offer support to identify, control, reduce, or eliminate pollutant sources and stormwater runoff by offering technical assistance and information on Best Management Practices (BMP's).

Coordination of this effort is made with the City's IDDE

Educational Messages

The goal of the 2017 Education and Outreach Plan is to deliver to the community various stormwater-related messages while inspiring specific actions that address pollution prevention, promote installation green stormwater infrastructure, encourage LID-centric stormwater management, and provide positive impacts to our local waterways. Each Education and Outreach Program will strive to incorporate the following messages and invoke actions:

- The cumulative effort of individual citizens can create significant impacts/detriments to our waterways
- Only Rain Down the Drain general message
- Fish Friendly Car Washing
- Scoop Fido's Poo
- Streamside Landscaping
- Don't Feed the Ducks!
- Plant a Rain Garden
- Remove Impervious Surfaces (pave permeably!)
- Get Disconnected from the stormwater system
- LID applications: permeable pavement, rain gardens, rain barrels

Analysis

Measurement of the understanding and adoption of stormwater awareness and behavior changes will be focused in the Local Source Control Program, targeting businesses to encourage proper storage and handling of dangerous and hazardous materials.

During visits to selected businesses Staff discuss which BMPs can be implemented to improve on or incorporate in their day to day practices. Summary letters are sent to the businesses within two weeks of the site visits, outlining the BMPs recommended and giving information on how to implement them as well as suggested timelines. As part of the summary information a feedback survey is provided in which the business is asked to identify any BMPs they have already adopted. A follow-up visit is made within two months to review with the business on-site the actions they have taken and record their adopted behaviors that have resulted from the LSC program site visits, information, and outreach.

This data is compiled to evaluate which BMPs are most-often adopted, noted barriers to adoption, and costs associated with any changes made by the business.

Evaluation and Adjustments

The Local Source Control Program was evaluated for effectiveness of successful behavior change in 2016, as required by the permit. Based on a 68% implementation rate of suggested BMPs for all businesses visited, the program will continue as the main focus of the Education and Outreach requirement S5.C.1a.ii.a requirement. Further details of the success of this City program at the regional level has been published in the past (2016 – most recent) and will continue to be evaluated at the Ecology-level as well as locally.