CITY OF PUYALLUP

2022 STORMWATER MANAGEMENT PROGRAM PLAN

(SWMPP)

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CITY OF PUYALLUP 2022 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:

- Stormwater Planning
- Public Education and Outreach
- Public Involvement and Participation
- MS4 Mapping and Documentation
- Illicit Discharge Detection and Elimination
- Controlling Runoff from Development, Redevelopment, and Construction Sites
- Operations and Maintenance
- Source Control Program for Existing Development
- 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 Stormwater Management Program Plan (SWMPP). 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 July 2019, Ecology's NPDES program is operating under the fourth issued permit. The City has been covered under each of the four 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
- August 1, 2018 to July 31, 2019 (extension for the previous permit)
- August 1, 2019 to July 31, 2024

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 permit was extended for one year until then end of July of 2019. After updates and review, the current permit was adopted August 1, 2019.

This document is the City's written documentation of the *Stormwater Management Program Plan (SWMPP).* The remainder of this 2020 SWMPP document describes actions Puyallup will take to maintain compliance during the 2020 Permit period, as required by the Permit (i.e., August 1, 2019 through July 31, 2024).

This new permit includes many continuations and some changes to the previous requirements. As such, this document will reflect the City's plans for ongoing and updated compliance to meet all of the requirements of the new permit.

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 expired due to a one year extension on July 31, 2019. The new permit that was adopted in July of 2019 comes with new requirements.

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 - 2022 Education and Outreach Plan

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

https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Municipal-stormwater-general-permits/Western-Washington-Phase-II-Municipal-Stormwater

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, during annual internal reporting, and during weekly development review meetings. The City has contracted with Brown and Caldwell to review our program and staffing to determine if/where there are any gaps are in our program, codes or standards and highlight where inserting additional staff would be required to meet the new requirements and timelines of the permit.

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 https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Total-Maximum-Daily-Load-process .

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 issuance of this permit and any subsequent modifications. 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 2022.
- **Section 3.0** addresses Permit requirements for Stormwater Planning for 2022
- **Section 4.0** addresses Permit requirements for Public Education and Outreach for 2022.
- **Section 5.0** addresses Permit requirements for Public Involvement and Participation for 2022.
- **Section 6.0** addresses Permit requirements for MS4 Mapping and Documentation for 2022
- **Section 7.0** addresses Permit requirements for Illicit Discharge Detection and Elimination for 2022.
- **Section 8.0** addresses Permit requirements for Controlling Runoff from New Development, Redevelopment and Construction Sites for 2022.

- **Section 9.0** addresses Permit requirements for Operation and Maintenance for 2022.
- **Section 10.0** addresses Permit requirements for a Source Control Program for Existing Development for 2022.
- **Section 11.0** addresses Permit requirements for Compliance with Total Maximum Daily Load Requirements
- **Section 12.0** addresses Permit requirements for Monitoring and Assessment for 2022.

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

CITY OF PUYALLUP 2022 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 12 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, 2022.
- The City hired Brown and Caldwell and they perform a staffing analysis for the City. This staffing analysis is meant to review the existing and future permit requirements and determine where we will need additional staff and how many FTE will be required to implement future permit requirements. This analysis was

completed in early 2021. This has been and will be used to inform council of our needs and hopefully convince them to fund additional staffing to support our program implementation requirements.

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 2022 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. 2022 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 Stormwater training.	Individual department/HR	Ongoing process
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.
SWMP-4	NPDES staffing analysis	Engineering-Stormwater	Completed April 2021

CITY OF PUYALLUP 2022 STORMWATER MANAGEMENT PROGRAM

3 STORMWATER PLANNING

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:

Implement a Stormwater Planning Program to inform and assist in development of policies and strategies as water quality management tools to protect receiving waters. This will be obtained by:

- Convening an interdisciplinary team to inform and assist in the development, progress and influence of the program.
- Coordinating with long range plan updates
- Implementing Low impact development code-related requirements.
- Implementing Stormwater management action planning (SMAP). The City will conduct a similar process and consider the range of issues outlined in the Stormwater Management Action Planning Guidance (Ecology, 2019; Publication 19-10-010). The City may rely on another jurisdiction to meet all or part of SMAP requirements at a watershed-scale. Provided a SMAP is completed for at least one priority catchment within the City's jurisdiction.

3.2 Current Activities

Low Impact Development code-related requirements.

The City of Puyallup is continuing to require LID principles and LID when updating, revising, and developing new local development related codes, rules, standards or other enforceable documents as needed. We have been and will continue to make LID the preferred and commonly-used approach to site development based on the adopted Stormwater Management Manual for Western Washington and the requirements of the Phase 2 Municipal Permit.

We will continue to assess local development related codes, rules, standards, or other enforceable documents to ensure that they are designed to minimize impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations where feasible, based on the adopted Stormwater Management Manual for Western Washington and the requirements of the Phase 2 Municipal Permit.

The City convened the interdisciplinary team prior to August 1, 2020 and we have hired a consultant to work though the SMAP process requirements.

We have hired NHC to work with us to complete our SMAP as required by the permit.

3.3 Planned Activities

Throughout the planning process, the interdisciplinary team will meet with the consultant to discuss progress and that stormwater management needs and protection/improvement of receiving water health, information the planning update process and influencing policies and implementing strategies are included in future long range plan updates.

Specifically, we will ensure that the report will describe the water quality and watershed protection policies, strategies, codes and other measures intended to protect and improve local receiving water health through planning or taking into account stormwater management needs or limitations.

Stormwater Management Action Planning will be applied to City as outlined and discussed in the Stormwater Action Planning Guidance as the schedule in the Permit requires. A receiving water prioritization will be performed. We will continue to document and assess information to identify which receiving water are most likely to benefit from stormwater management planning.

Table 3-1. 2022 Stormwater Planning Work Plan

Task ID	Task Description	Lead	Schedule Notes
S.PLAN-1	Convene interdisciplinary team to inform and assist in the development, progress, and influence of this program	Stormwater Department	By August 1, 2020, completed
S.PLAN-2	Coordinate with long-range plan updates	Stormwater Department	Ongoing, 3/31/2021 questions on annual report. 1/1/2023 report due showing implementation
S.PLAN-3	Continue implementing LID in code, rules, other documents.	Stormwater Department	Ongoing
S.PLAN-4	Assess and document newly identified administrative or implementation barriers to LID, describe any newly developed mechanisms	Stormwater Department	Annually
S.PLAN-5	Receiving water assessment	Stormwater Department	Ongoing, Submit watershed inventory by March 31, 2022
S.PLAN-6	Receiving water prioritization	Stormwater Department	By June 2022
S.PLAN-7	SMAP for at least one high priority catchment	Stormwater Department	By March 31, 2023

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4 PUBLIC EDUCATION AND OUTREACH

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

4.1 Permit Requirements

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

- Provide an education and outreach program for the area served by the MS4. The program shall be designed based on local water quality information and target audience characteristics to identify high priority target audiences, subject areas, and/or BMPs and consider delivering the messages in languages other than English when appropriate.
- The City will build general awareness by selecting one annually selecting at a minimum one target audience and once subject area from the S.5.C.2.a.i.(a) or (b)
- The City shall attempt to effect behavior change by selecting a target audience and one BMP annually and follow the timeline as required in the permit in order to implement and evaluate this strategy.
- As part of this program, the City will provide stewardship opportunities and/or partner to encourage residents to participate in activities or events planned within the community.

4.2 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 general public (including school-age children) and businesses (including home based and mobile businesses) on the topics of:
  - 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
- To effect behavior change, the City has elected to target general public and businesses on:
  - Keeping dumpsters closed and the why this is an important BMP to ensure pollution doesn't enter our waterways

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 to direct efforts and resources most effectively. The 2022 program is discussed in detail in the '*2022 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 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 2022. 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.
- Puyallup's Rain Garden Program 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.
- 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.
- Habitat Site Steward Program. 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 managed 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.
- Regional Dumpster Campaign. The City has decided to participate in the regional dumpster campaign in order satisfy S5.C.2.a.ii. We have noted an issue within the City and thought this program would allow us to address the issue with added support for materials and social marketing strategy. We have started following the community based social marketing practices and collecting data. We have implemented the strategy and schedule as required by the permit by April 1, 2021.

4.3 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 2022, the main focus will be restaurants, property management companies as well as work with mobile businesses. In 2022, the LSC Specialist position will again be partially back-funded through a Department of Ecology Pollution Prevention Assistant contract agreement. This funding currently extends through June 2023.

4.4 Planned Activities

The City plans to expand its Education and Outreach program in 2022 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.

The City reapplied and are currently an active participant in the Pollution Prevention Assistance Program with the Department of Ecology for the FY2021-2023 period. We are currently implementing the program requirements.

The City continues to incorporate the 'Puget Sound Starts Here' logo in its publications where possible, to maintain the regional-recognition efforts with cross-jurisdiction branding. 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. Currently the city of facilitating that group, which helps us engage with and learn from other municipalities.

In addition, we plan to continue our work with the regional dumpster outreach group to satisfy the behavior change requirements of the permit.

Table 3-1 is a work plan that summarizes the anticipated 2022 SWMPP public education and outreach activities including those that will be continued from 2021 and detailing anticipated expansions of the program to include new focus on audiences such as school-age children and businesses.

Table 4-1. 2022 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 2020 below
EDUC-2	Conduct evaluation of effectiveness of ongoing behavior change campaign.	Stormwater Department	N/A
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
EDUC-6	Stormwater related stories in PCD publication.	Stormwater Department, PCD	Ongoing

Table 4-1. 2022 Public Education and Outreach Work Plan			
Task ID	**Task Description**	**Lead**	**Schedule Notes**
EDUC-7	Open Space, Stream, and Riparian zone Stewardship Program	Stormwater Department, PCD	Ongoing
EDUC-8	Outreach to Puyallup School District for stormwater educational calendar project	Stormwater Department	Ongoing
EDUC-9	Puyallup's Rain Garden Program	Stormwater Engineering,	Ongoing
EDUC-10	Streamside Planting Program	Stormwater Engineering	Ongoing
EDUC-11	Provide education and information for private storm system owners on maintenance and reporting program (Rain Garden recipients and permitted facilities subject to inspection and reporting).	Stormwater Engineering	Ongoing
EDUC-12	Refine and continue IDDE education to public, employees, businesses and general public outreach program, solicit feedback, and produce report	LSC, Stormwater Engineering	Ongoing
EDUC-13	Utilize various media to promote the stormwater message and program	City Management, Planning, Stormwater Engineering	Ongoing
EDUC-14	Update City Manager's brief as needed. This also includes posting updated materials on website in relation to the education and outreach work plan.	Stormwater Engineer	Ongoing
EDUC-15	Involve City staff in stormwater education and promotional events	Stormwater Engineering	Ongoing
EDUC-16	Track types of public education and outreach activities implemented, # of activities implemented	Stormwater Engineering	Ongoing
EDUC-17	Follow social marketing and practices similar to community based social marketing and tailored to the community including an evaluation plan	Stormwater	By February 1, 2021, Ongoing
EDUC-18	Begin to implement strategy in EDUC-17	Stormwater	By April 1, 2021, Ongoing
EDUC-19	Evaluate and report on the change in understanding and adoption of target behaviors from implementing E&O strategy and any planned changes planned to be more effective	Stormwater	By March 21, 2024
EDUC-20	Use results of analysis in EDUC-19 to continue to direct effective methods and implementation of the ongoing behavior and change program.	Stormwater	Start/ongoing after March 21, 2024

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5 PUBLIC INVOLVEMENT AND PARTICIPATION

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

5.1 Permit Requirements

The Permit (Section S5.C.3) 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 and SMAP.
- 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.

5.2 Current Activities

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

- The City will implement public involvement activities intended to meet the Permit requirements in development of its update to the SWMPP and SMAP (when applicable). 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 will post the Draft 2022 SWMPP and the 2021 Annual Report on the City website.
- The City, in partnership with Pierce Conservation District, has solicited input and involvement in development of Riparian Site Management Plans for various city-owned riparian/open space parcels around the city and close to various streams.
- The City is currently going through a rate analysis which has involved public input and comment.

5.3 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

Table 4-1 is the work plan for 2022 SWMP public involvement activities. These tasks will be refined through an iterative process of interviews and workshops with staff from affected City departments.

Table 5-1. 2022 Public Involvement Work Plan			
Task ID	**Task Description**	**Lead**	**Schedule Notes**
PI-1	Provide public involvement opportunities for annual SWMPP update and SMAP as the stages progress..	Stormwater Engineer	Public involvement opportunities will be available before and after 3/31/2022 submittal of the SWMPP and as the SMAP is compiled.
PI-2	Make SWMPP, SMAP (as it is compiled) 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.

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6 MS4 MAPPING AND DOCUMENTATION

This Section describes the Permit requirements related to mapping and documentation current and planned compliance activities.

6.1 Permit Requirements

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

Include an ongoing program for mapping and documenting the MS4 in the City's SWMP

6.2 Current Activities

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

- Continue maintaining mapping data for the features listed in S5C.4.a.i-vii
- Check existing data points and collect size and material for all known MS4 outfalls during normal course of business and update records.

6.3 Planned Activities

Complete mapping of all known connections to a privately owned system by August 1, 2023.

Make all of our mapping available to Ecology, Indian Tribes, Municipalities and other Permittees as requested.

Table 6-1. 2022 MS4 Mapping and Documentation Work Plan

Task ID	Task Description	Lead	Schedule Notes
M&D-1	Maintain and update, as needed, current GIS stormwater layer to include annexed areas and new infrastructure	Public Works, Collections	Ongoing
M&D-2	Check existing data points and collected remainder of size and material for all known MS4 outfalls	Public Works, Collections	Ongoing.
M&D-3	Ensure all data is formatted as required in the current permit.	Public Works, Collections	By August 1, 2021, complete
M&D-4	Complete mapping of all known connections to a privately owned system formatted	Public Works, Collections	By August 1, 2023

Table 6-1. 2022 MS4 Mapping and Documentation Work Plan			
Task ID	**Task Description**	**Lead**	**Schedule Notes**
M&D-5	Make all of our mapping available to Ecology, Indian Tribes, Municipalities and other permittees.	Public Works, Collections, Stormwater Engineering	Available upon request, and the data is available on the City's GIS and mapping webpage

CITY OF PUYALLUP 2022 STORMWATER MANAGEMENT PROGRAM

7 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.

7.1 Permit Requirements

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

- Maintain an ongoing program to prevent, detect, characterize, trace and eliminate illicit discharges and connections into the City's MS4.
- This program shall include procedures for reporting and correcting or removing illicit connections, spills and other illicit discharges when they are suspected or identified. The program shall also include procedures for addressing pollutants entering the MS4 from and interconnected , adjoining MS4
- Illicit connections and illicit discharges must be identified though, but not limited to: field screening, inspections, complaints/reports, construction inspections, maintenance inspections, source control inspections, and/or monitoring information, as appropriate. An illicit discharge means "any discharge to a municipal separated storm system that is not composed entirely of stormwater…" and illicit connection means "any infrastructure connection to the MS4 that is not intended, permitted or used for collecting and conveying stormwater or non-stormwater discharges as allowed by the permit (for example, sanitary sewers, floor drains, channels pipelines, inlets, or outlets connected directly to the MS4).
- Inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.
- Implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges in the permittee's MS4 to the maximum extent allowable under state and federal law.
- Implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4. The program shall include field screening and methods for identifying potential sources.
- Screening shall complete field screening for an average of 12% of the MS4 each year. Permittees shall track total percentage of the MS4 beginning August 1, 2019.
- Implement an ongoing program to address illicit discharges, including spills and illicit connections, into the MS4. Program shall include elements listed in S5.C.5.e.
- 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.5.g. including using the format that is described in Appendix 12 and/or WQWedIDDE.

7.2 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 ARCGIS Online and 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.
- The City is field screening a minimum of 12% of the MS4 each year and tracking the overall percentage of MS4 screened beginning August 1, 2019.
- City code (PMC 21.11) adopted in August 2009 specifies IDDE program and enforcement provisions.
- The City has an emergency phone number posted on the City's website, various templates for permits, yearly stormwater calendars, LSC personnel's voicemail, stormwater staff's email, all City Pollution Prevention Plans that allow 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 31st, of each year.
- The City is reporting through the WQWedIDDE portal.

7.3 Planned Activities

Puyallup plans to continue current illicit discharge detection and elimination program efforts in order to meet field screening activity requirements stated in S5.C.5 and maintain existing IDDE program-related activities. Table 5-1 details the work plan for 2022 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 7-1. 2022 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	ongoing

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
IDDE-10	Track the number of illicit discharges, including spills and use the format specified in the Permit	Public Works Collections	Ongoing
IDDE-11	Track number of inspections for Illicit Connections	Public Works Collections	Ongoing
IDDE-12	Continue to develop a field screening methodology and complete screening of 12% average of MS4 per year.	Public Works Collections	Ongoing
IDDE-13	Track total percentage of MS4 inspected per year	Public Works Collections	Ongoing

CITY OF PUYALLUP 2022 STORMWATER MANAGEMENT PROGRAM

8 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.

8.1 Permit Requirements

The Permit (Section S5.C.6) 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 transportation projects. This means continuing to implement existing programs developed under previous permits until updates are made to meet the schedules defined in this permit.
- The program shall include a permitting process with site plan review, inspection, and enforcement capability to meet the standards listed in S5.C.6.c(i) through (viii).
- Adopt and make effective a local program , no later than June 30, 2022 that meets the requirements of S5.C.6.b(i) through (iii)
- Enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.
- Provide training to staff, whose job it is are implementing the program, 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.
- Ensure that links to the NOI for Industrial Stormwater General Permits and Construction Stormwater General Permits are made available and that the City enforces ordinances regarding runoff from these sites covered by these permits.

8.2 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 informs permittees when a Stormwater General Permit through DOE will be required for construction and/or industrial activities during the permit review process and provides informational DOE links and documentation to the developers when requested. The City summarizes associated activities in its Annual Report by March 31st, of each year.
- The City provides general stormwater training, sediment and erosion control and/or cescl training, training on implementation of WWSM requirements, meets weekly to ensure everyone is on the same page and implements the WWSM requirements in a uniform manner and is continuing to develop training for staff on new codes, standards and processes related to current Permit-required code changes related to stormwater management.
- The City is continuing to revise the program to review, 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 hired Brown and Caldwell to update our codes in order to adopt the 2019 manual and the updated O&M requirements within the manual.

8.3 Planned Activities

Puyallup has a program to help reduce stormwater runoff from new development and construction sites and is continuing to update the program to maintain compliance per new Ecology-directed Permit requirements. Table 8-1 is the work plan for 2022 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 8-1. 2022 Controlling Runoff from Development, Redevelopment, and Construction Sites Work Plan

Task ID	Task Description	Lead	Schedule Notes
CTRL-1	Continue to revise permitting process SOPs to implement new LID-related code.	Engineering	Ongoing.
CTRL-2	Continue on-going management of project record-keeping system for permitting, plan review, construction site inspections, and enforcement actions.	Engineering	Ongoing

Table 8-1. 2022 Controlling Runoff from Development, Redevelopment, and Construction Sites Work Plan			
Task ID	**Task Description**	**Lead**	**Schedule Notes**
CTRL-3	Train staff responsible for implementing the revised program to control runoff from new development, redevelopment, and construction sites.	Engineering	Ongoing
CTRL-4	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.
CTRL-5	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	Ongoing
CTRL-6	Adopt 2019 SWMMWW and make effective a local program that meets the requirements of S5.C.6.b(i) through (iii)	Engineering	Before June 30, 2022
CTRL-7	Inspect all sites prior to Clearing and construction that meet the minimum thresholds adopted pursuant to S5.C.6.b.i..	Engineering	Ongoing
CTRL-8	Inspect construction phase stormwater controls at permitted sites to verify proper installation and maintenance of erosion and sediment controls during construction and every 6 months until 90% of lots are constructed (or when construction has stopped and the site is fully stabilized, 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 information and links to 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

Table 8-1. 2022 Controlling Runoff from Development, Redevelopment, and Construction Sites Work Plan			
Task ID	**Task Description**	**Lead**	**Schedule Notes**
CRTL-12	Implement current and revised annual O&M inspection program including record keeping and enforcement.	Stormwater Engineering	Ongoing
CRTL-13	Achieve 80% completion of schedule private stormwater facility inspections, including catch basins	Stormwater Engineering	Yearly
CTRL-14	Maintain and implement an enforcement strategy to respond to issues of non-compliance	Stormwater/Development Engineering	Ongoing

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9 OPERATION AND MAINTENANCE FOR MUNICIPAL OPERATIONS

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

9.1 Permit Requirements

The Permit (Section S5.C.7) requires the City to:

- Implement and document a program to regulate maintenance activities and to conduct maintenance activities by the permittee to prevent or reduce stormwater impacts
- Establish maintenance standards that are as protective, or more productive, of facility function than those specified in the *Stormwater Management Manual for Western Washington* approved by Ecology. For facilities that do not have maintenance standards, the permittee shall develop a maintenance standard.
- The Permittee shall update their maintenance standards based on S5.C.7.a.i and ii no later than June 30, 2022.
- Maintain stormwater facilities that are regulated by the permittee including implementing a program that includes provisions to verify long term O&M of treatment and flow control facilities that have been permitted pursuant to S.5.C.6.c and maintained in accordance with S5.C7.a. The provisions shall include requirements as stated in S5.C.7.b.i.(a and b).
- Compliance with section S5.C.7.b.i.(b) shall be determined by records and of an established inspection program designed to inspect all facilities and achieving at least 80% of required inspections.
- The program that is put into place for the Maintain stormwater facilities that are regulated by the permittee are required to include a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and activities must be maintained.
- Perform inspection and cleaning 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.
- Clean all catch basins every two years if the inspections indicate cleaning is needed to comply with maintenance standards established in the Stormwater Management Manual for Western Washington. Or the Permittee may clean all pipes, ditches and catch basins and inlets within a circuit once during the permit term. Decant water shall be disposed of in accordance with Appendix 6 – Street Waste Disposal.
- Compliance with the inspection requirements in S5.C.7.c.i-iii, shall be determined by the presence of an established inspection program achieving at least 95% of required inspection.

- Implement practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the permittee. No later than December 31, 2022, document the practices policies and procedures. Address the activities stated in S5.C.7.d.i-xv.
- Implement an ongoing training program for employees of the Permittee whose primary construction, operations, or maintenance job functions may impact stormwater quality and address all required items per S5.C.7.e.
- 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. As necessary, update SWPPPs no later than December 31, 2022, to include the information found in S5.C.7.f.i-v.
- Maintain records of inspections and maintenance or repair activities required in this section.

9.2 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 trash 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 City has a training program that covers all practices, policies and procedures identified above.
- The City hired Brown and Caldwell to update our codes in order to adopt the 2019 manual and the updated O&M requirements within the manual.

- The City has hired aspect consulting to update our SWPPPs and implement practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the permittee in order to address the activities stated in S5.C.7.d.i-xv

9.3 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 9-1 is the work plan for 2022SWMP 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 9-1. 2022 Pollution Prevention and Operations and Maintenance Work Plan

Task ID	Task Description	Responsible	Schedule Notes
PPOM-1	Update maintenance standard as required by section S5.C.7.a.i,ii-	Public Works Collections, Stormwater Engineering	By June 30, 2022
PPOM-2	Inspect 95% of all flow control, treatment facilities and catch basins	Public Works Collections	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	Document the practices, policies and procedures used to implement PPOM-6	Public Works, Parks, Engineering	By December 31, 2022
PPOM-8	Implement Stormwater Pollution Prevention Plan (SWPPP) for Corporate Yards, Waste Water Treatment Plant and Parks Maintenance Facilities.	Public Works, Parks	Ongoing
PPOM-9	Perform periodic visual inspections to evaluate effectiveness of SWPPP	Public Works, Parks	Periodic
PPOM-10	Update SWPPP to include information in S5.C.7.f.i-v	Public Works, Parks, Engineering	By December 31, 2022

Table 9-1. 2022 Pollution Prevention and Operations and Maintenance Work Plan			
Task ID	**Task Description**	**Responsible**	**Schedule Notes**
PPOM-11	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-12	Track number of catch basins inspected and number cleaned for reporting period	Public Works Collections	Ongoing
PPOM-13	Train staff on Operations and Maintenance procedures contained in Regional Road Maintenance ESA Program Guidelines, track number of trainings	Engineering	Periodic
PPOM-14	Install a material storage shed to cover loose rock, sand and gravel materials at the Corporate Yards	Engineering	Temporary cover provided, project will commence when funds are available
PPOM-15	Design and construct a Decant Facility at the Corporate Yards.	Engineering	2021/2022 construction
PPOM-16	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.

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10 SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT

10.1 Permit Requirements

The Permit (Section S5.C.8) requires the City to implement a program to prevent and reduce pollutants in runoff from areas that discharge to the MS4 that includes:.

- Application of operational source control BMPs, and if necessary structural source control BMPs and/or treatment BMPs/facilities to pollutant generating sources associated with existing land uses and activities.
- Inspections of pollutant generating sources at publicly and privately owned institutional , commercial and industrial sites to enforce implementation of required BMPs to control pollution discharging into the MS4.
- Application and enforcement of local ordinances at sites, identified pursuant to S5.C.8.b.ii, including sites with discharges authorized by separate NPDES permits.
- Practices to reduce polluted runoff from the application of pesticides, herbicides, and fertilizers from the sites identified in the inventory.
- Permittees shall adopt and make effective an ordinance, or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities as required in the Phase 2 permit no later than August 1, 2022
- Permittees shall establish an inventory that identifies publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4 including businesses and/or sites identified based on the presence of activities that could be pollutant generating, or other pollutant generating sources based on complaint response, no later than August 1, 2022.
- Permittees shall implement an inspection program for sites identified pursuant to S5.C.8.b.ii. These inspection programs must meet the requirements in section S5.C.8.b.iii (a-d) no later than January 1, 2023.
- Permittees shall implement a progressive enforcement policy that requires sites to comply with stormwater requirements within a reasonable time frame as mention in S5.C.8.b.iv.(a-d).
- Permittees shall train and provide follow up training for staff who are responsible for implementing the source control program to conduct these activities as required by the Phase 2 permit. Documentation of this training must be kept.

10.2 Current Activities

- The City currently has local source control inspection program that provides education and outreach to Puyallup businesses as described in section 4.3 of this plan.
- The City is currently reviewing the sites that may be polluters in order to get a list and proceeds together to meet the time lines in the permit.

- The City Stormwater staff is using the previously performed staffing analysis to inform City Council and we are trying to obtain an additional staff member to perform the Source Control Inspections.

10.3 Planned Activities

Puyallup will be working to ensure that we meet the timelines as required above in section 10.1.

Once we receive the report from Brown and Caldwell, we will make further plans to implement changes to our program. We expect these requirements listed above will require a large commitment from staff to complete.

The City summarizes associated activities in its Annual Report by March 31st, of each year

Table 10-1 is the work plan for 2020 SWMP Source Control Program activities. These tasks will be refined through an iterative process of interviews and workshops with staff from affected City departments.

Table 10-1. 2022 Public Involvement Work Plan

Task ID	Task Description	Lead	Schedule Notes
SCP-1	Work to educate and inform local potential pollution generating sources utilizing our existing program, and inform them of the upcoming changes to our program	Stormwater Engineer	Ongoing
SCP-2	Complete program/gap analysis in order to determine additional staffing requirements	Stormwater Engineer	Completed 2021.
SCP-3	Review potential pollution generating sites in the City and create inventory and process for future	Stormwater Engineer	Complete
SCP-4	Adopt and ordinance, that requires the application of BMPs for pollution generating sites	Stormwater Engineer	Required complete by August 1, 2022
SCP-5	Implement inspection program for local source control for the inventory determined above as required in the permit	Stormwater Engineer	Required by January 1, 2023
SCP-6	Implement a progressive enforcement policy that requires sites to comply with S5.C.8.b.iv.(a-d)	Stormwater Engineer	Required by January 1, 2023

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11 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.

11.1 Permit Requirements

This Permit section (Section S11) applies only to municipalities where an applicable TMDL is approved for stormwater discharges from the MS4. There are 3 applicable TMDLs listed in Appendix 2 of the Phase 2 permit including: WRIA 10 – Puyallup River (Fecal Coliform)

- Designate areas discharging via the MS4 to Deer Creek as high priority areas for illicit discharge detection and elimination. Complete IDDE screening for bacteria sources in 100% of these MS4 subbasins by July 31, 2024 and implement the schedules and activities identified in S5. C.5 of the Phase II Permit in response to any illicit discharges found and include all results in annual reports submitted to Ecology

- WRIA 10 –Clarks Creek (Fecal Coliform)
  - Designate areas discharging via the MS4 to Meeker Creek as high priority areas for illicit discharge detection and elimination. Complete IDDE screening for bacteria sources in 100% of these MS4 subbasins by July 31, 2024 and implement the schedules and activities identified in S5. C.5 of the Phase II Permit in response to any illicit discharges found and include all results in annual reports submitted to Ecology
- WRIA 10-Clarks Creek (Sediment and DO)
  - The permittee shall operate, inspect and maintain existing water quality improvement projects (WQIPs) that achieve a combined average of 51 tons a year by December 31, 2021. The permittee shall apply the crediting methodologies described in the Retrofit Plan.
  - The permittee shall operate, inspect and maintain existing water quality improvement projects that all together remove or treat 21.4 MG of stormwater per year based on the October 21, 2003 storm event by December 31, 2021. The permittee shall apply the crediting methodologies described in the Retrofit Plan.
  - The Permittee shall develop and submit a reporting ledger for the City's Pollutant Load Reduction crediting system by March 31, 2020. This reporting ledger shall quantify annual sediment reduction credits and stormwater volume treated or reduced credits awarded to all operational WQIPs during the first 3 years of implementation.
  - By April 1, 2021 the Permittee shall submit an update of the Plan that includes the WQIPs proposed for the January 1, 2022 – July 31, 2024 reporting period.
  - By November 1, 2023 the Permittee shall submit an update of the Plan that includes the WQIPs proposed for the 5 year reporting period beginning August 1, 2024.
  - The Permittee shall submit a reporting ledger that quantifies annual sediment reduction and stormwater volume treated or reduced credits awarded to all operational projects during the first six years of Plan implementation (2017-2022) by March 2023.

- Facilities in need of maintenance that impedes facility function cannot receive credit unless a QAPP and methods for determining % function have been agreed upon.
- The Permittee may draft a QAPP that outlines information gathered to calibrate the regenerative air sweeping programs annual calculation of sediment reduction credits. This must be submitted for review and approval prior to July 1, 2020.
- The Permittee shall conduct public education and outreach activities that increase awareness among residents of the sources of polluted runoff affecting Clarks Creek and its tributaries.

11.2 Current Activities

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

- Designate 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 7 of this document.
- Designate 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 7 of this document.
- Working on implementing the Ecology approved QAPP and starting the 1 year sampling period in order to quantify the removal rate of our street sweepers.
- Inspecting facilities as required and reporting on them yearly within the ledger.
- Installing Streamside plantings along Clarks Creek yearly.
- Updating the Retrofit plan as required for submittal.
- We are continuing our public education and outreach activities to increase awareness among residents of the sources of polluted runoff affecting Clarks Creek and its tributaries.

11.3 Planned Activities

The City will be working toward completing field screenings and implementing IDDE requirements as the timing in the permit requires. In addition we will be working to ensure we implement, track and update reports as required for our WQIPs that are used to meet our TMDL for sediment and DO goals set by this permit.

Table 11-1 is the work plan for 2022SWMP activities related to TMDL activities. These tasks were developed through an iterative process of interviews and workshops with staff from affected City departments.

Table11-1. 2022 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	By July 31, 2024
TMDL-2	Manage MS4 areas discharging to Deer Creek per the IDDE program	Public Works Collections	Ongoing and as required after 2024 screening
TMDL -3	Complete field screening in areas of the MS4 that discharge to Meeker Creek	Public Works Collections	By July 31, 2024
TMDL-4	Manage MS4 areas discharging to Meeker Creek per the IDDE program	Public Works Collections	Ongoing and as required after 2024 screening
TMDL-5	Achieve average 51 tons removed a year.	Stormwater Engineering	Dec. 31, 2021
TMDL-6	Remove or treat 21.4 MG/Year	Stormwater Engineering	Dec. 31, 2021
TMDL-7	Develop and submit a reporting ledger for the WQIPs during first 3 years of operation.	Stormwater Engineering	Complete
TMDL-8	Update of the Retrofit Plan that includes the WQIPs proposed for the January 1, 2022 – July 31, 2024 reporting period.	Stormwater Engineering	April 1, 2021
TMDL-9	Update of the Plan that includes the WQIPs proposed for the 5 year reporting period beginning August 1, 2024.	Stormwater Engineering	November 1, 2023
TMDL-10	Submit a reporting ledger that quantifies annual sediment reduction and stormwater volume treated or reduced credits awarded to all operational projects during the first six years of Plan implementation (2017-2022)	Stormwater Engineering	March 31, 2023
TMDL-11	Draft a QAPP that outlines information gathered to calibrate the regenerative air sweeping programs annual calculation of sediment reduction credits.	Stormwater Engineering	Complete, now sampling
TMDL-12	Conduct public education and outreach activities that increase awareness among residents of the sources of polluted runoff affecting Clarks Creek and its tributaries	Stormwater Engineering	Ongoing
TMDL-13	Increase shading along Clarks Creek	Stormwater Engineering	Ongoing

CITY OF PUYALLUP 2022 STORMWATER MANAGEMENT PROGRAM

12 MONITORING AND ASSESSMENT

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

12.1 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.
- Make a one time payment on or before December 1, 2019 if the permittee chose the Status and trends monitoring option 1 in the previous permit cycle.
- Notify Ecology in writing by December 1, 2019 of the Status and Trends Monitoring Option (a or b) the City chooses to carry out and continue to pay into these funds prior to August 15th every year if option b chosen..
- Make a one time payment on or before December 1, 2019 if the permittee chose the Effectiveness studies option 1 in the previous permit cycle.
- Notify Ecology in writing by December 1, 2019 of the Effectiveness and source identification studies Option (a or b) the City chooses to carry out and continue to pay into these funds prior to August 15th every year if option b chosen..

12.2 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 as required per option a.

12.3 Planned Activities

In the current permit term (August 2019 through July 2025), the City will continue 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 12-1 presents the work plan for 2022 SWMP monitoring activities.

Table 12-1. 2022 Monitoring and Assessment Activities

Task ID	Task Description	Lead	Schedule Notes
MNTR -1	Pay Ecology's specified fees for option a implementation	Stormwater Engineering	Before August 15th Yearly
MNTR-2	Select Status and Trends option	Stormwater Engineering	Completed December 2019
MNTR-3	Select Effectiveness Study option	Stormwater Engineering	Completed December 2019

APPENDIX A

Acronyms and Definitions

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

2022 City of Puyallup Stormwater Education and Outreach Plan

2022 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 2022 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 S5.C.2. 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 2019-2024 NPDES MSWGP, Puyallup has made the following selections for outreach groups and topics to meet the requirements for Public Education and Outreach:

S5.C2.

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…
      a) *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…
      a) Property managers/owners, businesses
         - Closing dumpster lids

The **Outreach Plans** section of this document describes how the above objectives will be reached through various programs and projects planned for 2022. These programs will each offer opportunities for residents, businesses, and other interested parties to take action and support improvements to and the protection of local 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.2 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 funding sources and current programs within the City. Where possible, efforts are combined to realize benefits of leveraging efforts and funds. The 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 14th year in 2022 based on the eleven-year foundation of successful projects within the City. This program has received project funding in this year's budget. With this and funding for eligible items from the Capacity Grant funding we are hoping to advertise and reach out to a greater number of citizens. 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 2022 program focuses on promotion of the program through City web pages, word of mouth and social media. 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 cost-share for construction. The program includes various green stormwater elements:

- Rain gardens
- Permeable pavements
- Rain barrels

Riparian/Streamside Plantings

This program promotes planting of streamside properties in the Clarks Creek basin (along Meeker, Silver, and Clark's creeks). The first three years of the program saw limited growth, with many homeowners reluctant to plant the streamside area of their properties. However, the City and its program partner, PCD continue to offer the program to residents to capture those that are willing to support our local waterways through reduction in untreated stormwater runoff from their properties. This program is funded through our stormwater program budget.

In the past, 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 order to ensure plantings, occur even though a lack of interest in this program, the City is also focused on continuing to plant along the creeks and streams where we own property. We prioritize these planting zones and will continue this effort (for example, along City owned Property adjacent to Clarks Creek).

This year we are trying a new tactic by holding plant give always and engaging with homeowners adjacent to the creek with mailers. We will try to get homeowners on board to allow the PCD and Washington Conservation Corps on their property to plant along the creek. Once planted, PCD and WCC crews will monitor the plantings to increase the likelihood of survival and potential for the plants to grow large enough to provide shade over the creek.

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 sections. In addition to rollover funding from the 2021 budget, the City has allotted additional stormwater funds. In addition, this program is support Puyallup's Street Department who performs the replacement/retrofit work as part of regularly-scheduled maintenance.

Stormwater Pollution Prevention Artwork Contest/Calendar Program

The Stormwater Calendar Program, initiated in 2012, provides 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. Due to COVID-19 restrictions, the last calendar published, covering January through December 2022, highlighted art from Maplewood Elementary and Shaw Road Elementary, 5th and 6th grade classes, which were visited winter of 2019. In 2022, city stormwater staff will partner with a city staffed Summer Day-Camp, bringing pollution prevention lessons to a broader audience of school-age children, not limiting the city to selecting one or two classrooms.

The calendars are distributed on the city's webpage and around city facilities promoting stormwater fun facts and ways residents can participate in 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

In 2019 the City began to shift toward the upcoming NPDES MSWGP requirements for Local Source Control including development of local code to add regulatory language and strength to the program to require businesses to comply with Pollution Prevention Planning requirements. In 2021 we have started gathering data created a list of who the potential polluters area. We will continue moving forward utilizing City code that has been implemented and adopt additional code prior to the required deadline in order to transition into the new permit cycle. In addition, he have started discussions with Code enforcement in so that we can work more closely with them enforce this code. We will be looking at ways to integrate the PPA program with the required Local Source Control Program requirements that has been included in the new Phase 2 Permit.

Pollution Prevention Assistance

The City's Pollution Prevention Assistance (PPA)program, formally Local Source Control (LSC) Program began as a partnership with Ecology, funded through an interagency agreement and aligning with Ecology's PPA program to provide education and outreach to small businesses that generate small quantities of dangerous and hazardous waste. This program will work in tandem with the Local Source Control Program once the Permit required inspections for LSC commence in 2023. We will be able to receive credit for the PPA inspections as LSC inspections, however, the PPA program does not allow enforcement, so if enforcement is required, it will have to be handled outside of the PPA program (and within the LSC program).

Through this program the city's PPA specialist, reaches out to, but not limited to the business sectors highlighted in their contract. With the focus on restaurants, mobile businesses, and property management

companies, including strip malls and multi-family housing. During COVID the program had to adjust to ensure those businesses where still able to receive assistance from the program. While this proved to be a bit difficult, the program is better equipped to provide guidance virtually. The city in 2022 will continue to work within the PPA program in the creation of resource consistency, provide training to onboarding specialist, and one on one mentoring of assigned staff of neighboring jurisdictions joining the program. The spring and summer bring farmers' markets, festivals, and the Western Washington State fair; our PPA specialist, will coordinate with those organizers and vendors to ensure pollution prevention efforts are optimal and arrangements are made to minimize their environmental impact.

Fish Friendly Car Wash Program

Implemented in 2010 along with several other regional jurisdictions, the Fish Friendly Car Wash (FFCW) Program did not gain momentum and has provided small returns for the invested time. The program includes a free-loan program of pre-packaged kits that include a basin tub and submersible pump to install in catch basins where car wash water drains to. The pumps would then allow that wash water to be re-directed and pumped elsewhere, away from the stormwater system (and eventual local water ways).

The FFCW Program was originally developed to prevent stormwater runoff pollution from car wash activities – such as fund-raising events – but also to provide education and outreach on where our stormwater goes and how that soapy water, and other pollutants, can affect fish in our local waterways.

As a local-concern focus of the LSC Specialist and program in 2016, the city began promoting the program to local businesses to serve as points-of-presence and destinations for hosting community FFCW events. Our LSC Specialist also continued to reach out to schools and churches to educate about the free-loan program to ensure they are aware of the program and to utilize the kits when fundraising.

Collaborating as a member of the regional STORM network, Stormwater Staff have shared program experiences on the FFCW kits. The city has concluded that, beginning in 2018 the FFCW kits were discontinued. Lessons-learned with regional groups and unpublished data indicate low effectiveness of the kits to reduce flows into the stormwater system. In combination with limited use of the free-loan kit program has determined the return on time investment would be more effective if directed toward promotion of alternative car-wash programs such as the resale of car wash coupons from the Western Car Wash Association, formally Puget Sound Car Wash Association group.

In 2022 we will continue to actively promote the car wash coupons and educating on the harm of car wash water entering the streams and rivers. Directing those groups and organizations that use carwashes as fundraisers to take a different approach in support of pollution prevention measures in their communities. In addition to the car wash coupons, the city advocates for those running fundraisers to reach out to their local self-wash locations and inquiring on renting a bay or bays for the day- this way the water is treated, and they still get the feel of the old-fashioned car wash fundraiser.

Private Catch Basin Marking

In 2022 the city will continue the practice of installing markers near stormwater catch basins that include educational *Only Rain Down the Drain* messages. This program includes four individual efforts to achieve the goal of marking all private and public catch basins within the city.

1. City's Standard Details for catch basins require the application of the city-provided markers by developers at all newly installed CBs
2. PPA Program staff outreach to businesses during regular PPA Site Visits to gain permissions to mark the drains on private property with the CB markers

3. Volunteer marking of CBs is coordinated by Pierce Conservation District, and often carried out as lasting projects for Eagle Scouts, student volunteers, and individual
4. Replacement of damaged CB markers and installation in newly identified high-traffic or event-related areas of the downtown core are completed by Stormwater Staff

Participation in the Regional Dumpster Outreach Campaign

We have chosen to participate in the regional Dumpster Outreach Campaign in order to meet our behavior change component of the permit requirements. In our many years of PPA work and IDDE work we have observed many locations that can benefit from this campaign. Which is why we felt passionate to join. We have started to implement this campaign and look forward to working with this group as the work progresses. In the months during the pilot portion of the campaign regardless of our multiple attempts to reach out to businesses, our guidance was not well received. While we do not know if this was due to the pandemic that was in full effect during this time, we continued to send literature to the businesses we were gathering data on. During this time, we noticed that even though we were not getting the participation within the program that we desired, there was a change in the business's best practices. In 2022 we have continued to monitor those businesses we gathered initial data on and will work on encouraging them to join the Shut the Lid campaign, once again, along with 10-20 other businesses, all while continuing to gather data to measure behavior change. We do believe that the initial hesitation to joining the campaign had a majority to do with COVID and all the uncertainty swarming around it; and that in 2022 will bring a different outcome for this targeted behavior change.

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 PPA and Local Source Control (LSC) Programs 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 Program Staff from the Collections Section of Public Works.

As always, we make sure the IDDE personnel are trained as required. They have attended classes on the new ICID Manual and our stormwater 101 course. We have also provided all field staff with our stormwater 101 course that focuses on (among other topics) informing staff on what to do when they see a spill, who to call and why it is important. We will continue this training for seasonal field staff in 2022.

Educational Messages

The goal of the 2022 Education and Outreach Plan is to deliver to the community various stormwater-related messages while promoting actions that address pollution prevention, encourage installation of green stormwater infrastructure, create LID-centric stormwater management, and provide positive impacts to local waterways. Each Education and Outreach Program will strive to incorporate the following messages and invoke actions:

- The cumulative effort of individual citizens supports collective improvements and protection of waterways
- Only Rain Down the Drain – general message
- Fish Friendly Car Washing – use a commercial car wash; fundraise by selling coupons
- Exercise good Pet Waste Management at home, and while away
- 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
- Close your dumpsters, for healthier waterways!
- Small changes, make a BIG difference!

Analysis

Measurement of the understanding and adoption of stormwater awareness and behavior changes will be focused in the Dumpster Program, targeting businesses to encourage proper dumpster use. This seems to be a relatively easy concept to explain and hopefully gain compliance with since leaving a dumpster open and potentially be a large source of pollution. We will be working on providing information, and pathways to make closing the dumpsters a more common occurrence.

During visits to selected businesses staff discuss which BMPs can be implemented to improve on or incorporate in their day-to-day practices. We targeted 4 businesses to start, providing ways to help them remember and educating by providing communication tools to remind them of implementation. With multiple attempts to engage with management and employees our advances were shut down. Even though there was little to no cooperation, there was evidence that the resources provided to the businesses was received. Due to the increased closure of the dumpster lids after the baseline data was gathered. In the final data gathered there was a lid closure rate of 67%, where in the initial baseline data only had 53% observed lids closed. With our increased effort in 2022, we are hopefully for an even higher lid closure percentage.

Evaluation and Adjustments

We will continue following up with these dumpsters/businesses to see how effective our communication tools are and modifying tactics as required.

Stewardship

We will be continuing to provide Stewardship opportunities though our collaboration with the Pierce Conservation District. They help us by coordinating the Stream team in Puyallup, as well as volunteers to help with catch basin marking, riparian plantings. These events also provide an education in why these activities are important.