



CITY OF PACIFIC
ANNUAL
STORMWATER MANAGEMENT
PROGRAM (SWMP) PLAN
January – December 2023

*This SWMP is an attachment to the City's 2022 Annual Report to the Department of Ecology
for its Phase II NPDES Permit*

In compliance with the provisions of

*The State of Washington Water Pollution Control Law Chapter 90.48 Revised Code of
Washington and*

*The Federal Water Pollution Control Act (The Clean Water Act) Title 33 United States Code,
Section 1251 et seq.*

March 2023

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Abbreviation and Acronyms

AKART	All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment
BMP	Best Management Practice
CD/PWD	Community Development / Public Works Departments
CESCL	Certified Erosion and Sediment Control Lead
City	City of Pacific
Ecology	Washington Department of Ecology
ECOSS	Environmental Coalition of South Seattle
IDDE	Illicit Discharge Detection and Elimination
LID	Low Impact Development
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
PMC	Pacific Municipal Code
PSAC	Pacific Stormwater Advisory Committee
Permit	Phase II Western Washington NPDES Municipal Stormwater Permit
Phase II Permit	Phase II Western Washington NPDES Municipal Stormwater Permit
SIDIR	Source Identification Information Repository
SWMMWW	Stormwater Management Manual for Western Washington
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan

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Section 1

Introduction

1.1 Overview and Background

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

The Western Washington Phase II Municipal Stormwater Permit (Permit) outlines stormwater program activities and implementation milestones that the City must follow to comply with federal Clean Water Act. As a general permit, the Permit applies to more than 80 MS4s in western Washington. Each Phase II community is required to develop a Stormwater Management Program (SWMP) that includes a description of the required activities, implement those activities within the required timeframes of the permit term, and submit annual reports to Ecology by March 31st each year to document progress toward permit compliance.

Pacific was first issued a Phase II Permit in 2007 and has been implementing a SWMP since that time. Ecology issued the current Permit in 2012, and it became effective on August 1, 2013. Ecology subsequently issued a permit modification on December 17, 2014, which became effective January 16, 2015. The permit modification includes minor changes to correct inconsistencies and scribes' errors, changes to definitions to clarify the intent of some permit language, and substantial changes to the watershed-scale stormwater planning requirement, which is not applicable to the City. The Permit covers a five-year period from August 2013 to July 2018. The permit was extended for one year, to July 1, 2019. A new permit was issued on August 1, 2019 which extends through July 31, 2024.

In accordance with Permit requirements, the City has developed a SWMP designed to reduce the discharge of pollutants to the maximum extent practicable (MEP), meet all known, available, and reasonable methods of prevention, control and treatment (AKART) requirements, and to protect water quality. The following sections describe the actions that Pacific has and will take to comply with the requirements of the Permit.

1.2 Departmental Responsibilities

The City Stormwater Manager, under the supervision of the Public Works Manager, is responsible for general Permit compliance, stormwater public education and outreach, public involvement in stormwater concerns, regulating the entrance of non-stormwater pollutants into the MS4, and regulating runoff on construction sites and developments.

The City Engineer is responsible for developing procedures for compliance with the Permit, training staff from other departments, and reporting.

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

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

The City’s stormwater utility funds the SWMP based on impervious area, the presence of stormwater flow control and water quality treatment for commercial properties and on a base rate for residential properties.

1.3 Document Organization

This report comprises the required written documentation of the City’s SWMP. This report has been prepared in accordance with Section S5.A of the NPDES permit.

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

Chapter 2 – 2023 Stormwater Management Program, Monitoring and Reporting Plan

2.1	Stormwater Planning.....	S5.C.1
2.2	Public Education and Outreach.....	S5.C.2
2.3	Pubic Involvement and Participation.....	S5.C.3
2.4	MS4 Mapping and Documentation.....	S5.C.4
2.5	Illicit Discharge Detection and Elimination [IDDE]	S5.C.5
2.6	Controlling Runoff from Development, Redevelopment, and Construction Sites	S5.C.6
2.7	Operations and Maintenance [O&M]	S5.C.7
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Section 2

2023 Stormwater Management Program Activities

2.0 STORMWATER MANAGEMENT PROGRAM FOR CITIES, TOWNS, AND COUNTIES (S5)

- A. Each Permittee shall develop and implement a Stormwater Management Program (SWMP). A SWMP is a set of actions and activities comprising the components listed in S5 and any additional actions necessary, to meet the requirements of applicable TMDLs pursuant to S7 – Compliance with Total Maximum Daily Load Requirements and S8 – Monitoring and Assessment. This Section applies to all cities, towns, and counties covered under this Permit (termed as “Permittee,” including cities, towns, and counties that are Co-Permittees).

New Permittees subject to this Permit, as described in S1.D.1.b, shall fully meet the requirements in S5 as modified in footnotes below, or as specified in an alternate schedule as a condition of coverage by Ecology. Permittees obtaining coverage after the issuance date of this Permit shall fully meet the requirements in S5 as specified in an alternate schedule as a condition of coverage by Ecology.

1. At a minimum, the Permittee’s SWMP shall be implemented throughout the geographic area subject to this Permit as described in S1.A.
2. Each Permittee shall prepare written documentation of the SWMP, called the SWMP Plan. The SWMP Plan shall be organized according to the program components in S5.C or a format approved by Ecology, and shall be updated at least annually for submittal with the Permittee’s annual reports to Ecology (see S9 – Reporting Requirements). The SWMP Plan shall be written to inform the public of the planned SWMP activities for the upcoming calendar year, and shall include a description of:
 - a) Planned activities for each of the program components included in S5.C.
 - b) Any additional planned actions to meet the requirements of applicable TMDLs pursuant to S7– Compliance with Total Maximum Daily Load Requirements.
 - c) Any additional planned actions to meet the requirements of S8 – Monitoring and Assessment.
3. The SWMP shall include an ongoing program for gathering, tracking, maintaining, and using information to evaluate SWMP development, implementation, and permit compliance and to set priorities.
 - a) Each Permittee shall track the cost or estimated cost of development and implementation of each component of the SWMP. This information shall be provided to Ecology upon request.
 - b) Each Permittee shall track the number of inspections, follow-up actions as a result of inspections, official enforcement actions and types of public

education activities as required by the respective program component.
This information shall be included in the annual report.

4. Permittees shall continue implementation of existing stormwater management programs until they begin implementation of the updated stormwater management program in accordance with the terms of this Permit, including implementation schedules.
 5. Coordination among Permittees
 - a) Coordination among entities covered under municipal stormwater NPDES permits may be necessary to comply with certain conditions of the SWMP. The SWMP shall include, when needed, coordination mechanisms among entities covered under a municipal stormwater NPDES permit to encourage coordinated stormwater-related policies, programs and projects within adjoining or shared areas, including:
 - i. Coordination mechanisms clarifying roles and responsibilities for the control of pollutants between physically interconnected MS4s covered by a municipal stormwater permit.
 - ii. Coordinating stormwater management activities for shared water bodies, or watersheds among Permittees to avoid conflicting plans, policies, and regulations.
 - b) The SWMP shall include coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of this Permit. Permittees shall include a written description of internal coordination mechanisms in the **Annual Report due no later than March 31, 2023.**
- B. The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the MEP, meet state AKART requirements, and protect water quality.
- C. The SWMP shall include the components listed below. To the extent allowable under state or federal law, all components are mandatory for city, town, or county Permittees covered under this Permit.

The sub-sections that follow include the permit requirements and the proposed City plans to achieve compliance with each element in the upcoming year.

2.1 STORMWATER PLANNING (S5.C.1)

Each Permittee shall implement a Stormwater Planning program to inform and assist in the development of policies and strategies as water quality management tools to protect receiving waters.

The minimum performance measures are:

- a. By August 1, 2020, each Permittee shall convene an inter-disciplinary team to inform and assist in the development, progress, and influence of this program.

Stormwater Planning is a new element of the 2019 – 2024 NPDES Permit. The City of Pacific Public Works Department is responsible for the operation and maintenance of the City stormwater system. The City carried out this responsibility in part by having a comprehensive Stormwater Management Program (SWMP) that establishes policy, service level standards, and a Capital Improvement Plan (CIP) designed to meet the goals and objectives of the City.

The City has established and convened an Inter-Disciplinary Team by August 1, 2020. The group was composed of members from the following departments:

- *Community Development*
- *Public Works*
- *Finance and Administration*
- *Public Safety*

The team will work together to review City codes and permit requirements; Ecology permit requirements; and Growth Management Act requirements; etc. The necessary code and policy changes and updates will require careful balancing to achieve the needs of all agency dictates.

- b. Coordination with long-range plan updates.
 - i. Each Permittee shall describe how stormwater management needs and protection / improvement of receiving water health are (or are not) informing the planning update processes and influencing policies and implementation strategies in their jurisdiction. The report shall 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.
 - a) **On or before March 31, 2022**, the Permittee shall respond to the series of Stormwater Planning Annual Report questions to describe how anticipated stormwater impacts on water quality were addressed, if at all, during the 2013-2019 permit term in updates to the Comprehensive Plan (or equivalent) and in other locally initiated or state-mandated, long-range land use plans that are used to accommodate growth or transportation.

- b) **On or before January 1, 2023**, the Permittee shall submit a report responding to the same questions included in (a), above, to describe how water quality is being addressed, if at all, during this permit term in updates to the Comprehensive Plan (or equivalent) and in other locally initiated or state-mandated, long-range land use plans that are used to accommodate growth or transportation.

Table 2.1: Coordination with Long-Range Plans

Plan	Current Date	Beginning of next cycle of updates
Stormwater Capital Improvement Program	August, 2008	2023 / 2024 ?
Shoreline Master Program Update	October 2019	2027
Comprehensive Plan Chapter 2: Land Use	March 2016	2024
Comprehensive Plan Chapter 3: Natural Environment	November 2015	2024
Comprehensive Plan Chapter 8: Transportation Plan	November 2015	2024
Comprehensive Plan Chapter 9: Utilities	March 2016	2024
Comprehensive Plan Chapter 10: Capital Facilities	March 2016	2024

The preliminary schedule will identify the various milestone required for the NPDES Permit and the impacts of other required Plan documents.

The City is small with a population of less than 7,000. The various City public works and community development departments work in a collaborative manner to coordinate changes in policies. There are monthly inter-departmental meetings that are used to plan future Permit conditions and code changes.

Attached to this document are the questions and answers required by March 31, 2023.

- c. Low impact development code-related requirements.

- i. Permittees shall continue to require LID Principles and LID BMPs when updating, revising, and developing new local development-related codes, rules, standards, or other enforceable documents, as needed.

The intent shall be to make LID the preferred and commonly-used approach to site development. The local development-related codes, rules, standards, or other enforceable documents shall be designed to minimize impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations, where feasible.

The City will continue to require developers to adhere to low impact development (LID) methods, when technically feasible based on soil conditions and groundwater table constraints as outlined in the PMC 24, the NPDES II Permit, and the adopted Stormwater Design Manual. Periodic code review and updates will occur as necessary to meet permit requirements.

- (a) Annually, each Permittee shall assess and document any newly identified administrative or regulatory barriers to implementation of LID Principles or LID BMPs since local codes were updated in accordance with the 2013 Permit, and the measures developed to address the barriers. If applicable, the report shall describe mechanisms adopted to encourage or require implementation of LID principles or LID BMPs.

The City will continue to monitor LID barriers in the future, as in the past. Regulatory and administrative barriers usually require code changes which the City is able to complete with clear guidance from Ecology.

The primary physical barriers to using LID practices in the City continue to be:

- *Flat topography*
- *Unsuitable / Poor soils*
- *High groundwater*

We do not anticipate that the three conditions listed above will change any time in the near future.

The City will continue to review the Municipal Code, City Policies, and Development Regulations and modify as necessary to meet community needs and the requirements of the NPDES permit and GMA.

- ii. **By December 31, 2023**, New Permittees shall review, revise, and make effective their local development-related codes, rules, standards, or other enforceable documents to incorporate and require LID principles and LID BMPs. New Permittees shall conduct a similar review and revision process, and consider the range of issues, outlined in the following document: Integrating LID into Local Codes: A Guidebook for Local Governments (Puget Sound Partnership, 2012).

This section is not applicable to the City of Pacific at this time.

New Permittees shall submit a summary of the results of the review and revision process with the annual report due no later than **March 31, 2024**. This summary shall be in the required format described in Appendix 5 and include, at a minimum, a list of the participants (job title, brief job description, and department represented), the codes, rules, standards, and other enforceable documents reviewed, and the revisions made to those documents which incorporate and require LID principles and LID BMPs. The summary shall include existing requirements for LID principles and LID BMPs in development-related codes. The summary must be organized as follows:

- (a) Measures to minimize impervious surfaces.
- (b) Measures to minimize loss of native vegetation.
- (c) Other measures to minimize stormwater runoff.

This section is not applicable to the City of Pacific at this time.

- d) Stormwater Management Action Planning (SMAP). Permittees shall conduct a similar process and consider the range of issues outlined in the Stormwater Management Action Planning Guidance (Ecology, 2019; Publication 19-10-010). Permittees 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 located within the Permittee's jurisdiction.
 - i. Receiving Water Assessment. Permittees shall document and assess existing information related to their local receiving waters and contributing area conditions to identify which receiving waters are most likely to benefit from stormwater management planning.

By March 31, 2022, Permittees shall submit a watershed inventory and include a brief description of the relative conditions of the receiving waters and the contributing areas. The watershed inventory shall be submitted as a table with each receiving water name, its total watershed area, the percent of the total watershed area that is in the Permittee's jurisdiction, and the findings of the stormwater management influence assessment for each basin. Indicate which receiving waters will be included in the S5.C.1.d.ii prioritization process. Include a map of the delineated basins with references to the watershed inventory table.

 - a) Identify which basins are expected to have a relatively low Stormwater Management Influence for SMAP. See the guidance document for definition and description of this assessment.

Basins having relatively low expected Stormwater Management Influence for SMAP do not need to be included in S5.C.1.d.ii-iii.

- ii. Receiving Water Prioritization. Informed by the assessment of receiving water conditions in (i), above, and other local and regional information, Permittees shall develop and implement a prioritization method and process to determine which receiving waters will receive the most benefit from implementation of stormwater facility retrofits, tailored implementation of SWMP actions, and other land/development management actions (different than the existing new and redevelopment requirements). The retrofits and actions shall be designed to:
1. conserve, protect, or restore receiving waters through stormwater and land management strategies that act as water quality management tools,
 2. reduce pollutant loading, and
 3. address hydrologic impacts from existing development as well as planned for and expected future buildout conditions.

No later than June 30, 2022, document the prioritized and ranked list of receiving waters.

- a) The Permittee shall document the priority ranking process used to identify high priority receiving waters. The Permittee may reference existing local watershed management plan(s) as source(s) of information or rationale for the prioritization.
- b) The ranking process shall include the identification of high priority catchment area(s) for focus of the Stormwater Management Action Plan (SMAP) in (iii), below.

The City will look for opportunities to partner with other Lower White River / Puyallup River Valley permittees to fulfill the requirements of this section of the permit.

The City has been participating, and will continue to participate, in the City of Sumner hosted White River Dialogue Group meetings related to White River restoration.

The skill set and time commitments required to complete the SMAP is beyond the current capacity of City staff. The City has retained a consultant to aid in completing this component of the permit. The receiving water assessment and receiving water prioritization have been completed.

- iii. Stormwater Management Action Plan (SMAP). **No later than March 31, 2023**, Permittees shall develop a SMAP for at least one high priority catchment area from (ii), above, that identifies all of the following:
- a) A description of the stormwater facility retrofits needed for the area, including the BMP types and preferred locations.

- b) Land management/development strategies and/or actions identified for water quality management.
- c) Targeted, enhanced, or customized implementation of stormwater management actions related to permit sections within S5, including:
 - IDDE field screening,
 - Prioritization of Source Control inspections,
 - O&M inspections or enhanced maintenance, or
 - Public Education and Outreach behavior change programs.

Identified actions shall support other specifically identified stormwater management strategies and actions for the basin overall, or for the catchment area in particular.

- d) If applicable, identification of changes needed to local long-range plans, to address SMAP priorities.
- e) A proposed implementation schedule and budget sources for:
 - Short-term actions (i.e., actions to be accomplished within six years), and
 - Long-term actions (i.e., actions to be accomplished within seven to 20 years).
- f) A process and schedule to provide future assessment and feedback to improve the planning process and implementation of procedures or projects.

The City of Pacific comprises a very small area of the White River Basin. We will look for opportunities to partner with other Lower White River / Puyallup River Valley permittees to fulfill the requirements of this section of the permit.

The City's SMAP has been revised to include elements in Sections 5.4.2 and 6.1. Recommended elements applicable to targeted, enhanced, or customized implementation of stormwater management are highlighted in the following SMAP excerpt:

5.4.1 Comprehensive Plan Chapter 2 – Land Use

Proposed revisions to Chapter 2:

- *Policy LU-16.3: Promote efficient use of renewable resources, water, and energy through the use of natural drainage, indigenous landscaping, energy efficient siting and building construction, and recycling.*
 - **Add “where technically feasible in accordance with the 2001 Stormwater Drainage Plan and the latest Ecology approved King County Surface Water Design Manual” after to “avoid stormwater runoff” in the Discussion.**

- *Policy LU-16.5: Protect the quality and quantity of groundwater through application of critical area regulations and promotion of low-impact development techniques.*
 - Add the following to the end of the discussion, “**LID to be implemented as technically feasible as discussed in Policy LU-16.3.**”

5.4.2 Comprehensive Plan Chapter 3 – Natural Environment

Proposed revisions to Chapter 3:

- *Policy NE-1.4: Encourage the use of a variety of technologies that minimize environmental degradation and protect public health.*
 - Replace the second and third sentences of the discussion with “**LID shall be implemented where technically feasible in accordance with the 2001 Stormwater Drainage Plans and the latest Ecology approved King County Surface Water Design Manual. If LID is not feasible, reasoning why shall be documented in the SW Report during the design.**”
- *Policy NE-6.1: Prevent pollution of both surface and groundwater resources.*
 - Replace the bulleted list of the discussion with the following:
 - **Implement TESC BMPs in accordance with the latest Surface Water Manual.**
 - **Implement permanent BMPs in accordance with the latest SW Manual.**
 - **Implement LID where technically feasible and in accordance with the latest SW Manual.**
 - **Perform operations and maintenance in accordance with the latest SW Manual and NPDES Permit.**
 - **Conduct public outreach and education in accordance with the NPDES Permit.**

5.4.1 Comprehensive Plan Chapter 8 – Transportation

Proposed revisions to Chapter 8:

- *Policy T-9.3: Plan for the expansion of appropriate road shoulders to maintain safe areas for walking, jogging, and biking.*
 - Add “**or construction**” after “an expansion” and before “of stormwater facilities” in the first sentence of the discussion.
 - Add “**where technically feasible.**” to the end of the discussion

6. SCHEDULE

NPDES Phase II Permit Section S5.C.1.d.iii(e) discusses scheduling of short-term and long-term actions.

6.1 Short-Term Actions

S5.C.1.d.iii(e) identifies short-term actions as actions to be accomplished within 6 years. The NPDES Phase II Permit requires the SMAP to be completed by March 31, 2023. Specific SMAP actions currently scheduled by the City to be completed between March 31, 2023, and March 31, 2025, include the following:

- Requiring development projects to implement LID where technically feasible.
- Reducing the potential for nitrogen and pathogen transport in accordance with the strategies identified in the Receiving Water Prioritization Technical Memorandum. Such strategies include replacing failing septic systems or connecting to sanitary sewer systems, construction site stabilization, and implementing and maintaining temporary erosion and sediment control (TESC) BMPs during construction.
- Reducing the potential for sediment, phosphorous, and metals transport in accordance with the strategies identified in the Receiving Water Prioritization Technical Memorandum. Such strategies include construction site stabilization, implementing and maintaining TESC BMPs during construction, and maintaining good housekeeping practices for City and private sites.
- Implement treatment BMPs, source control BMPs, BMP maintenance, spill pollution prevention measures, and oil control BMPs for high-traffic and high-use sites as required by the NPDES Phase II Permit.
- Ongoing implementation of the City's IDDE program as required by the NPDES Phase II Permit.
- Preparing a database of industrial permittees that discharge to the City's storm sewer system to support the City's IDDE program.
- Inspecting for potential sanitary sewer cross connections with the storm sewer system.
- Confirmation of basic or enhanced treatment for discharges to Government Canal in accordance with the Receiving Water Prioritization Technical Memorandum.
- Partial or full completion of the following capital projects and their associated stormwater infrastructure elements as indicated in Table 5. Summary of Stormwater-Related Capital Facilities Plan:
 - CIP #1, Cedar Lane S, 1st Avenue E to 2nd Avenue SE
 - T8, Pacific Avenue Sidewalk
 - T20, Sundown Meadows Rehabilitation
 - T21, Citywide Sidewalks

2.2 PUBLIC EDUCATION AND OUTREACH (S5.C.2)

The SWMP shall include an education and outreach program designed to:

- Build general awareness about methods to address and reduce impacts from stormwater runoff.
- Effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.
- Create stewardship opportunities that encourages community engagement in addressing the impacts from stormwater runoff.

Permittees may choose to meet these requirements individually or as a member of a regional group. Regional collaboration on general awareness or behavior change programs, or both, includes Permittees developing a consistent message, determining best methods for communicating the message, and when appropriate, creating strategies to effect behavior change. If a Permittee chooses to adopt one or more elements of a regional program, the Permittee should participate in the regional group and shall implement the adopted element(s) of the regional program in the local jurisdiction.

The minimum performance measures are:

- a. Each Permittee shall implement an education and outreach program for the area served by the MS4. The program design shall be based on local water quality information and target audience characteristics to identify high priority target audiences, subject areas, and/or BMPs. Based on the target audience's demographic, the Permittee shall consider delivering its selected messages in language(s) other than English, as appropriate to the target audience.
- i. **General awareness.** To build general awareness, Permittees shall annually select at a minimum one target audience and one subject area from either (a) or (b):
 - a) *Target audiences:* General public (including overburdened communities, or school age children) or businesses (including home-based, or mobile businesses). Subject areas:
 - General impacts of stormwater on surface waters, including impacts from impervious surfaces.
 - Low impact development (LID) principles and LID BMPs.
 - b) *Target audiences:* Engineers, contractors, developers, or land use planners.
Subject areas:
 - Technical standards for stormwater site and erosion control plans.
 - LID principles and LID BMPs.
 - Stormwater treatment and flow control BMPs/facilities

- c) Permittees shall provide subject area information to the target audience on an ongoing or strategic schedule.

The City continues to provide and promote general awareness information to the public / homeowners via posted videos on Facebook and our email newsletter, as well as posting on the civic campus reader board. The general awareness data is based on the Puget Sound Starts here campaigns with the information being seasonally appropriate: all seasons – pick-up pet waste; Fall – clean-up yard waste; Winter – keep drains clear; Spring / Summer – proper car washing methods and natural gardening methods.

These were the same information campaigns used during the previous permit cycle. The parks department has observed less pet waste in the parks. Some of the City catch basins appear to be maintained by the adjacent property owners as there is less debris. We seldom see residents washing their cars in their driveways or streets. Clearly, there has been some behavioral change.

The biggest change was having the fire and police departments stop washing their vehicles in the driveway in front of the station. Achieving this change may have helped with convincing the citizenry to change their car washing habits. Due to frequent change and turnover of the personnel in Fire and Police Departments, this is an ongoing effort. The City continues to educate these municipal field staff on IDDE and the City believes this is having an impact in addition to the Spring/Summer proper car washing information the City promotes through the newsletter and Social Media platforms.

General information related to programs and public outreach and education will be updated periodically on the City's website, through social media, and at public locations where the City maintains display boards.

Table 2.2: 2023 Planned Public Education and Outreach (General Awareness)

Activity Date	Mode of Outreach	Description of Activities
July 7-9, 2023	<i>Social Media Reader Board Pacific Pulse Newsletter</i>	<i>Pacific Days -</i> <ul style="list-style-type: none"> <i>• The City utilizes games to educate the public about the water cycle, and other related stormwater activities.</i> <i>• Staff provides literature to stakeholders on a variety of stormwater issues: natural yard care; pet waste management; car washing; etc. The goal is educating the public that “only rain in the drain” Citizens of all ages are invited to attend and participate. The goal of this activity is to educate citizens to dispose of wastes properly to reduce the impact to the surface water. Citizens are provided literature on proper waste disposal; natural gardening methods; proper car washing; pet waste clean-up; etc. These appear to be successful as the vegetation growth at storm outfalls is no greater than the vegetation growth at other areas near ditches and streams.</i>
August 11, 2023 Options are being evaluated.	<i>Reader Board, Pacific Pulse Newsletter, Social Media, Door Hangers</i>	<i>Police Open House -</i> <ul style="list-style-type: none"> <i>• The City utilizes games to educate the public about the water cycle, and other related stormwater activities.</i> <i>• Staff provide literature to stakeholders on a variety of stormwater issues: natural yard care; pet waste management; car washing. The goal is educating the public that “only rain in the drain” Citizens of all ages are invited to attend and participate. The goal of this activity is to educate citizens to dispose of wastes properly to reduce the impact to the surface water. Citizens are provided literature on proper waste disposal methods; natural gardening methods; proper car washing; pet waste clean-up; etc. These appear to be successful as the vegetation growth at storm outfalls is no greater than the vegetation growth at other areas near ditches and streams.</i>

ii. **Behavior change.** To affect behavior change, Permittees shall select, at a minimum, one target audience and one BMP.

- a) *Target Audiences:* Residents, landscapers, property managers/owners, developers, school age children, or businesses (including home-based or mobile businesses).

BMPs:

- Use and storage of: pesticides, fertilizers, and/or other household chemicals.
- Use and storage of: automotive chemicals, hazardous cleaning supplies, carwash soaps, and/or other hazardous materials.
- Prevention of illicit discharges.
- Yard care techniques protective of water quality.
- Carpet cleaning.
- Repair and maintenance BMPs for: vehicles, equipment, and/or home/buildings.
- Pet waste management and disposal.
- LID Principles and LID BMPs.
- Stormwater facility maintenance, including LID facilities.
- Dumpster and trash compactor maintenance.
- Litter and debris prevention.
- Sediment and erosion control.
- (Audience specific) Source control BMPs (refer to S5.C.8).
- (Audience specific) Locally-important, municipal stormwater-related subject area.

- b) No later than July 1, 2020, each Permittee shall conduct a new evaluation of the effectiveness of an ongoing behavior change campaign (required under S5.C.1.a.ii and S5.C.1.c of the 2013 Permit). Permittees shall document lessons learned and recommendations for which option to select from S5.C.2.a.ii.(c).

Permittees that select option S5.C.2.a.ii.(c)3, below, may forgo this evaluation if it will not add value to the overall behavior change program.

- c) Based on the recommendation from S5.C.2.a.ii.(b), by February 1, 2021, each Permittee shall follow social marketing practices and methods, similar to community-based social marketing, and develop a campaign that is tailored to the community, including development of a program evaluation plan. Each Permittee shall:

1. Develop a strategy and schedule to more effectively implement the existing campaign; or
2. Develop a strategy and schedule to expand the existing campaign to a new target audience or BMPs; or
3. Develop a strategy and schedule for a new target audience and BMP behavior change campaign.

- d) No later than April 1, 2021, begin to implement the strategy developed in S5.C.2.a.ii.(c).6

- e) **No later than March 31, 2024**, evaluate and report on:

1. The changes in understanding and adoption of targeted behaviors resulting from the implementation of the

- strategy; and
- 2. Any planned or recommended changes to the campaign in order to be more effective; describe the strategies and process to achieve the results.
- f) Permittees shall use results of the evaluation to continue to direct effective methods and implementation of the ongoing behavior change program.

In 2020 the City began two coordinated business education and outreach programs with the Environmental Coalition for South Seattle (ECOSS), the King and Pierce County Hazardous Waste Dept. Both efforts are focusing on different types of businesses regarding illicit discharges through spill containment, response, and clean-up.

ECOSS is providing spill preparedness and response activities with a social marketing emphasis. Due to Covid these programs had a very slow start. To decrease in-person time, phone calls were made to businesses to set up spill kit deliveries that included spill training with supporting videos and posters, spill plans, site maps, and other BMPs applicable to the business sectors. A pledge of commitment is provided asking each business to train staff on the use of the kit, respond to spills, dispose of materials properly, and restock the spill kit that businesses are asked to initial, date and post, an important part of social marketing outreach.

Pre-service surveys are conducted with initial visits to gauge each business's current or baseline awareness of stormwater pollution prevention, and behavior around spill prevention, illicit discharges and spill response procedures. ECOSS has the capacity to engage multicultural businesses with in-language staff and support materials, including Chinese, Korean, Somali, Spanish and Vietnamese. In person in-language visits are especially important when there is a potential language or cultural barrier.

Businesses targeted include: truck repair, towing companies, construction and industrial businesses. King County also provided a few auto repair locations. Initial spill response training visits started in March 2022. After each spill kit delivery, the pre-service survey data is recorded.

Follow-up contact with post-service surveys were completed by November 2022, or at least six months after the initial visits. The post-service survey questions elicit a change in awareness and behavior change around stormwater pollution prevention and spill response. The post-service survey responses are compared to pre-service survey data to measure these changes. During these contacts, additional support is provided as indicated, including additional spill response trainings, updated spill plans, and other appropriate support.

The pre- and post-service survey questions will measure change in awareness and behavior around the following:

- *What is their awareness of where stormwater goes once it has entered the storm drain?*
- *Have they trained their staff to respond to spills because of the visit?*
- *Have they responded to spills/used the spill kit?*
- *If they used the kit, did they restock it?*
- *If they had a spill, did it enter a drain? and if so, did they report the spill to the City?*
- *Have they adopted spill prevention practices?*

By educating these businesses and promoting their awareness of storm pollution prevention will decrease the spill incidents and illicit discharges and provide them support with spill kits and spill response procedures.

BEA Environmental (new consultant) will continue spill response trainings and follow up visits through December 2023, with pre-service surveys for new businesses, and post-service surveys, along with additional as-needed support, to previously visited businesses. The targeted audience (business sector(s)) and/or BMPs addressed, will be changed annually. At the end of this four year campaign, the City will have enough information to demonstrate change in awareness and behavior over time around stormwater pollution prevention and spill response.

A review of the effectiveness of this program will be evaluated and an additional step may be added if we find that the current outreach isn't sufficient to change behaviors.

Potential barriers and solutions:

- Language – Language is considered a barrier when the spill kit delivery person doesn't speak the same language as the business owner or manager that ECOSS is working with. To address this barrier, ECOSS has spill plans and spill training posters in the following languages: English, Chinese, Korean, Somali, Spanish and Vietnamese.*

Additional languages of any great extent in the City of Pacific include Russian and Ukrainian. The City will coordinate with ECOSS to develop additional outreach materials to support these languages, utilizing both internal and external resources, as needed.

- Cost – Cost is considered a barrier as most businesses would balk at the cost of purchasing a spill kit of nearly \$100 per kit. To address this concern, the City has purchased the kits to give to businesses free of charge.*

Additionally, the fact that a spill could be expensive to clean up, and if it gets into the storm system and isn't reported, the business can be fined at least \$10,000. By providing a spill plan that has the spill hotline for the City, businesses can contact the City if a spill gets into a storm drain to help keep it from spreading downstream and keep the cost of cleanup low. The spill hotline for the Washington State Department of Ecology is also provided, and by reporting the spill to

Ecology, the business can avoid costly fines.

- iii *Time – The final barrier addressed with this program is time. Time is barrier because businesses are trying to stay in business, and a spill kit training visit might not be convenient at the time ECOSS staff show up, a manager or owner might not be available with which to speak, or they might want more staff to be involved with the spill training and they need time to set up the training. To address this issue, ECOSS works with the business to set up a training when it is convenient for them, if needed. The trainings are kept to 10 minutes when feasible, unless a business would like additional support or information. In addition, ECOSS has developed a series of in-language spill kit videos in English, Cantonese, Korean, Mandarin, Spanish and Vietnamese to email to a business so they can share the videos with staff for training purposes on their own schedule.*

King County Hazardous Waste Program is conducting site visits to the automotive repair sector providing support for hazardous materials handling and hazardous waste disposal. They provide support for secondary containment, and assistance with trading out more hazardous parts washer machines for less toxic systems through County and State rebate programs. In addition, they utilize their Voucher Incentive Program to provide cash back for any King County-based business towards reducing or eliminating hazardous materials and waste.

A few of the auto repair shops were in need of spill kits and spill response information. King County directed those businesses to ECOSS for these materials and trainings.

King Co Hazardous Waste have been visiting Pacific businesses to provide the following technical and financial assistance for managing hazardous waste, hazardous materials and protecting surface and stormwater:

- 1. Walk through of business including outside storage areas and catch basins to provide guidance on how to achieve BMPs*
- 2. Provide Spill kits, spill plans, and recommendations for protecting surface and stormwater*
- 3. Financial assistance to incentivize BMP behavior changes (can be used for following recommended BMPs for storage and disposal of hazardous materials and wastes, catch basin clean out, catch basin repair and other improvements).*

4. *Guidance for choosing Safer Chemical alternatives if there is an opportunity, and ongoing technical support if applicable.*
5. *Information about Department of Ecology regulations, Dangerous Waste regulations and others, and assistance for determining which regulations and BMPs apply to them.*
6. *Assistance to becoming a recognized EnviroStars. The EnviroStars program includes opportunities to network with other businesses and encourages environmental stewardship.*

iii. **Stewardship.** Each Permittee shall provide and advertise stewardship opportunities and/or partner with existing organizations (including non-permittees) to encourage residents to participate in activities or events planned and organized within the community, such as: stream teams, storm drain marking, volunteer monitoring, riparian plantings, and education activities.

General information related to programs and public outreach and education will be updated periodically on the City's website, through social media, and at public locations where the City maintains display boards.

Table 2.3: 2023 Planned Public Education and Outreach (Stewardship)

Activity Date	Mode of Outreach	Description of Activities
On-Going	<i>Social Media, Civic Campus Message Board, Email, Pacific Pulse Newsletter</i>	<i>The City of Pacific began an Adopt-A Drain program. A short video was created and placed on social media and the City web page. The electronic reader board at City Hall has informed the residence of the program and directed them to the web page for additional details.</i> <u>Adopt-A-Drain Program - City of Pacific, WA</u>
April 22, 2023 First Advertisement on Facebook was March 20, 2023	<i>Social Media, Civic Campus Message Board, Email, Pacific Pulse Newsletter</i>	<i>The City of Pacific celebrates Earth Day on a Saturday close to April 23rd. Citizens of all ages are invited to attend and participate. The goal of this activity is to educate citizens to dispose of wastes properly to reduce the impact to the surface water. Citizens are provided literature on proper waste disposal methods; natural gardening methods; proper car washing; pet waste clean-up; etc. These appear to be successful as the vegetation growth at storm outfalls is no different than the vegetation growth at other areas near ditches and streams. Due to Covid19, we will attempt a "Social Distance" form of our usual plan. Residents are invited to celebrate this day as we always have collecting debris from streets and waterways and bring trash to City Hall for disposal.</i>

General information related to programs and public outreach and education will be updated periodically on the City's website, through social media, and at public locations where the City maintains display boards.

Table 2.3: 2023 Planned Public Education and Outreach (Stewardship)

<i>Activity Date</i>	<i>Mode of Outreach</i>	<i>Description of Activities</i>
<i>September 22, 2023</i>	<i>Reader Board, Pacific Pulse Newsletter, Banners, Social Media</i>	<i>IUT Wetland Planting Anniversary -</i> <ul style="list-style-type: none"> <i>• We will invite the public to help wetland restoration near Pacific Meadows Wetlands. The purpose of this project is to educate the public on the importance of wetlands and natural habitat and their roles in reducing sediments and toxic materials in our stormwater system and open waters.</i>

Pacific Pulse Newsletter stormwater articles:

- Adopt-A-Drain: Jan 2023
- Pick Up Pacific: Mar 2023
- Pick Up Pacific: Apr 2023
- Lawn Clippings: Jun 2023
- Sam The Clam – No Discharge Zone: Jul 2023
- IDDE: Sep 2023
- Wash Right (Car Washing): Sep 2023
- Bin Basics – Keep Container Lids Closed: Sep 2023
- Keep Storm Drains Clean: Sep 2023
- Scoop The Poop: Sep 2023
- Think Before You Flush: Oct 2023
- Adopt-A-Drain: Oct 2023
- Adopt-A-Drain: Nov 2023
- Fatbergs: Nov 2023

Stewardship Activities

Adopt-a-Drain: On-going

Pick Up Pacific: April 22, 2023

Wetland Planting Anniversary: Yearly

All others are general education.

2.3 PUBLIC INVOLVEMENT AND PARTICIPATION (S5.C.3)

Permittees shall provide ongoing opportunities for public involvement and participation through advisory councils, public hearings, watershed committees, participation in developing rate-structures or other similar activities. Each Permittee shall comply with applicable state and local public notice requirements when developing elements of the SWMP and SMAP.

The minimum performance measures are:

- a. Permittees shall create opportunities for the public, including overburdened communities, to participate in the decision-making processes involving the development, implementation and update of the Permittee's SMAP and SWMP.
- b. Each Permittee shall post on their website their SWMP Plan and the annual report, required under S9.A, no later than May 31 each year. All other submittals shall be available to the public upon request. To comply with the posting requirement, a Permittee that does not maintain a website may submit the updated SWMP in electronic format to Ecology for posting on Ecology's website.

The City of Pacific has and will continue to make the SWMP, the annual report, and all other submittals required by the permit available to the public both on the City's website and by hard copy at City Hall, no later than May 31 each year for public input. The public is invited to provide feedback via email, telephone, and letters.

[NPDES Phase II Permit - City of Pacific, WA \(pacificwa.gov\)](https://www.pacificwa.gov/npdes-phase-ii-permit)

The City has in the past and will continue to provide the following opportunities for public involvement and participation through action and/or provide input into the decision making process.

Table 2.4: 2023 Planned Public Involvement and Participation Activities

Activity Date	Methods of Notification for Comments and Participation	Description of Activities
The 2 nd and 4 th Monday of each month at 6:30 pm (If the date is a holiday, the following Tuesday) at public Council Meeting throughout the year	Council Meetings, Website, Social Media, and Reader Board	Each bi-weekly Council meeting has a time slot set aside for public comment. The public can address the council on any issue of concern, not on the agenda. The public may address the Council on stormwater and Permit issues.
March 13, 2023	Council Meetings, Website, and Social Media	The City will hold a Public Hearing to discuss the SWMP and the Permit. This will be an opportunity for the Citizens to comment and participate in the continued development of the SWMP and SMAP

The City of Pacific has and will continue to make the SWMP, the annual report, and all other submittals required by the permit available to the public both on the City's website and by hard copy at City Hall, no later than May 31 each year for public input. The public is invited to provide feedback via email, telephone, and letters.

[NPDES Phase II Permit - City of Pacific, WA \(pacificwa.gov\)](https://www.pacificwa.gov/npdes-phase-ii-permit)

The City has in the past and will continue to provide the following opportunities for public involvement and participation through action and/or provide input into the decision making process.

Table 2.4: 2023 Planned Public Involvement and Participation Activities

Activity Date	Methods of Notification for Comments and Participation	Description of Activities
By May 31, 2023	Council Meetings, Website, and Social Media	We will post the City SWMP and solicit comments from the public.
November, 2023	Social Media, Council Meetings, Paper of Record, Reader Board, Pacific Pulse Newsletter	The City will provide notice of Council Budget Hearings, when scheduled, regarding budget revenues and expenses and proposed utility activities for the next year. At this writing we do not know when these hearings will occur. The stakeholders may always participate by writing to the City Clerk, if desired.
November, 2023	Social Media, Council Meetings, Paper of Record, Reader Board, Pacific Pulse Newsletter	The City will provide notice of Council Budget Hearings, when scheduled, regarding budget revenues and expenses and proposed utility activities for the next year. At this writing we do not know when these hearings will occur. The stakeholders may always participate by writing to the City Clerk, if desired.

2.4 MS4 MAPPING AND DOCUMENTATION (S5.C.4)

The SWMP shall include an ongoing program for mapping and documenting the MS4.8.

The minimum performance measures are:

- a. Ongoing Mapping: Each Permittee shall maintain mapping data for the features listed below:
 - i. Known MS4 outfalls and known MS4 discharge points.
 - ii. Receiving waters, other than groundwater.
 - iii. Stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee.
 - iv. Geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters.
 - v. Tributary conveyances to all known outfalls and discharge points with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. The following features or attributes (or both) shall be mapped:
 - a) Tributary conveyance type, material, and size where known.
 - b) Associated drainage areas.
 - c) Land use.
 - i. Connections between the MS4 owned or operated by the Permittee and other municipalities or public entities.
 - vi. All connections to the MS4 authorized or allowed by the Permittee after February 16, 2007.
- b. New Mapping: Each Permittee shall:
 - i. No later than January 1, 2020, begin to collect size and material for all known MS4 outfalls during normal course of business (e.g. during field screening, inspection, or maintenance) and update records.
 - ii. **No later than August 1, 2023**, complete mapping of all known connections from the MS4 to a privately owned stormwater system.
- c. No later than August 1, 2021, the required format for mapping is electronic (e.g. Geographic Information System, CAD drawings, or other software that can map and store points, lines, polygons, and associated attributes), with fully described mapping standards.
- d. To the extent consistent with national security laws and directives, each Permittee shall make available to Ecology, upon request, available maps depicting the information required in S5.C.4.a through c, above.
- e. Upon request, and to the extent appropriate, Permittees shall provide mapping information to federally recognized Indian Tribes, municipalities, and other Permittees. This Permit does not preclude Permittees from recovering reasonable

costs associated with fulfilling mapping information requests by federally recognized Indian Tribes, municipalities, and other Permittees.

The City has maintained a map of its system since the first NPDES Phase II permit was issued in AutoCAD format, and will continue to update the map as new information is available. There is a color-coded legend indicating pipe locations and sizes. The map also provides sub-basin boundaries for drainage areas with outfall locations, including size and material of each outfall. Structure locations are also provided on the map as shown in Figures 2.4 A - 2.4 E. The City Zoning map is included as Figure 2.4F.

Many of the private non-residential storm systems are also included on the map, as well. These were added based on records the City has from past development projects. Current City policy requires private developers to provide CAD files for their projects to permit the City to easily update our files.

The City has completed the outfall mapping. Mapping connections between MS4 and privately owned stormwater systems will be an ongoing task to be completed by August 1, 2023.

This mapping has been and will continue to be available to those that request it.

2.5 ILLICIT DISCHARGE DETECTION AND ELIMINATION (S5.C.5)

The SWMP shall include an ongoing program designed to prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the MS4.

The minimum performance measures are:

- a. The 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 an interconnected, adjoining MS4.

Illicit connections and illicit discharges must be identified through, but not limited to:

- field screening,
- inspections,
- complaints/reports,
- construction inspections,
- maintenance inspections,
- source control inspections, and/or
- monitoring information, as appropriate.

The City of Pacific storm system, with outfalls located and associated drainage basins identified, is mapped and continues to be updated with new public (City-operated) and privately owned stormwater treatment and flow control facilities.

- b. Permittees shall inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.

The City will provide training on IDDE awareness at least one time per quarter to Public Works staff and one time per year to Police personnel. The training may include workshops, and/or participation in other public education opportunities. After taking the course they will provide an overview of the course to Public Works and Police department personnel. In addition, City Public Works personnel will review at least one IDDE video training available on line (<https://www.youtube.com/watch?v=wf4T5bJFQsM>, <https://www.youtube.com/watch?v=WOnR77luS-s>), per quarter.

The City will update standard operating procedures in the Pacific IDDE manual for indicator sampling of physical and chemical parameters, and follow indicator sampling procedures, when encountered, in response to illicit discharges discovered during field screening.

The City will continue to inform the public of the problems associated with dumping yard waste into surface water directly (Ditches and streams) or through storm drain catch basins. This will be done by monthly postings to social media, website, and local access cable channel.

The City will continue to inform business of the good management practices to reduce or eliminate IDDE by containing hazardous materials through proper BMPs for a particular business type and maintaining equipment and vehicles to reduce hazardous substances from

getting into private or public storm systems and into the public water ways. Information will be provided through on site meetings/inspections and/or mailings. City staff are working with BEA Environmental staff on an outreach program to businesses providing IDDE education and spill kits.

This project will include a pre- and post- project questionnaire.

- c. Each Permittee shall implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the Permittee's MS4 to the maximum extent allowable under state and federal law.

In 2017 the City adopted Ordinance 1949 which outlines the City IDDE policies which recodified in PMC 24.10. The City will continue to enforce this code through various code enforcement actions as required.

- i. Allowable Discharges: The regulatory mechanism does not need to prohibit the following categories of non-stormwater discharges:
 - a) Diverted stream flows
 - b) Rising groundwaters
 - c) Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(b)(20))
 - d) Uncontaminated pumped groundwater
 - e) Foundation drains
 - f) Air conditioning condensation
 - g) Irrigation water from agricultural sources that is commingled with urban stormwater
 - h) Springs
 - i) Uncontaminated water from crawl space pumps
 - j) Footing drains
 - k) Flows from riparian habitats and wetlands
 - l) Non-stormwater discharges authorized by another NPDES or state waste discharge permit
 - m) Discharges from emergency firefighting activities in accordance with S2 Authorized Discharges
- ii. Conditionally Allowable Discharges: The regulatory mechanism may allow the following categories of non-stormwater discharges only if the stated conditions are met:
 - a) Discharges from potable water sources, including but not limited to water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted, if necessary, and volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4.
 - b) Discharges from lawn watering and other irrigation runoff. These discharges shall be minimized through, at (c) Dechlorinated swimming pool, spa and hot tub discharges. The discharges shall be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-

- adjusted and reoxygenized if necessary, volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4.
- c) Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
- d) Street and sidewalk wash water, water used to control dust, and routine external building washdown that does not use detergents. The Permittee shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts. To avoid washing pollutants into the MS4, Permittees shall minimize the amount of street wash and dust control water used.
- e) Other non-stormwater discharges. The discharges shall be in compliance with the requirements of a pollution prevention plan reviewed by the Permittee, which addresses control of such discharges.
- iii. The Permittee shall further address any category of discharges in (i) or (ii), above, if the discharges are identified as significant sources of pollutants to waters of the State.
- iv. The ordinance or other regulatory mechanism shall include escalating enforcement procedures and actions.
- a) Each Permittee shall implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4. The program shall include the following components:
 - i. Procedures for conducting investigations of the Permittee's MS4, including field screening and methods for identifying potential sources. These procedures may also include source control inspections.

The Permittee shall implement a field screening methodology appropriate to the characteristics of the MS4 and water quality concerns. Screening for illicit connections may be conducted using Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual (Herrera Environmental Consultants, Inc.; May 2013), or another methodology of comparable or improved effectiveness. The Permittee shall document the field screening methodology in the Annual Report.

The City of Pacific currently implements activities and programs that meet the permit requirements. The City continues enforcing PMC 24.10, responding to illicit discharges and spills, educating the public about the hazards of IDDE through educational efforts and code enforcement as required to meet the requirements of the permit, and providing the public ways to report illicit discharges and spills. The City continues to refine processes and procedures for IDDE and other elements of stormwater program.

- a) All Permittees shall complete field screening for an average of 12% of the MS4 each year. Permittees shall annually track total percentage of the MS4 screened beginning August 1, 2019.

The City has received a WaterWorks grant from King County and conducted smoke testing of sewer lines looking for cross connections from storm systems during the Summer of 2020. The locations of possible cross connections is a starting point for additional screenings.

Some additional stormwater lines will also be screened for potential cross connections into the storm system.

After each major storm event (0.3 inches in a 24 hour period), storm water outfalls are inspected. The City also performs inspections of outfalls during dry weather. Outfalls that show signs of potential IDDE will also be screened for cross connections or illicit discharges. Between these two projects, we believe we can achieve 12% screening. The City utilizes the Herrera 2020 IC/ID Manual for field screening methodology.

Additionally, if on line courses are available for IC/ID Field Screening and Source Tracing Guidance offered through Washington Stormwater Center (<https://www.wastormwatercenter.org/>), we will have one or two staff members participate. If no online course is available, we will evaluate the in class option and the potential health impacts to employees to determine how participation will occur.

- ii. A publicly listed and publicized hotline or other telephone number for public reporting of spills and other illicit discharges.

The City of Pacific has and will continue to operate a stormwater hotline (253-929-1118). In addition, the City has Public Works Emergency Line (253-929-1198) and an email address at publicworks@ci.pacific.wa.us as methods of contacting the City regarding IDDE or other Public Works issues of concern.

- iii. An ongoing training program for all municipal field staff, who, as part of their normal job responsibilities, might come into contact with or otherwise observe an illicit discharge and/or illicit connection to the MS4, on the identification of an illicit discharge and/or connection, and on the proper procedures for reporting and responding to the illicit discharge and/or connection. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of the trainings provided and the staff trained.
- e. Each Permittee shall implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the Permittee's MS4. The program shall include:
 - i. Procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the Permittee. Procedures shall address the evaluation of whether the discharge must be immediately contained and steps to be taken for containment of the discharge.
 - ii. Procedures for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, collecting and analyzing water samples, and/or other detailed inspection procedures.
 - iii. Procedures for eliminating the discharge, including notification of appropriate authorities (including owners or operators of interconnected MS4s); notification of the property owner; technical assistance; follow-up inspections; and use of the compliance strategy developed pursuant to S5.C.5.c.iv, including escalating enforcement and legal actions if the discharge is not eliminated.

The City will provide training on IDDE awareness at least one time per quarter to Public Works staff and one time per year to Police personnel. The training may include workshops, and/or participation in other public education opportunities. After taking the course they will provide an overview of the course to Public Works and Police department personnel. In addition, City Public Works personnel will review at least on IDDE video training per quarter from those available on line (<https://www.youtube.com/watch?v=wf4T5bJFQsM>, <https://www.youtube.com/watch?v=WOnR77luS-s>),. We will continue to look for other opportunities for training on line or in class for staff.

- iv. Compliance with the provisions in (i), (ii), and (iii), above, shall be achieved by meeting the following timelines:
 - a) Immediately respond to all illicit discharges, including spills, which are determined to constitute a threat to human health, welfare, or the environment, consistent with General Condition G3.
 - b) Investigate (or refer to the appropriate agency with the authority to act) within 7 days, on average, any complaints, reports, or monitoring information that indicates a potential illicit discharge.
 - c) Initiate an investigation within 21 days of any report or discovery of a suspected illicit connection to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection.
 - d) Upon confirmation of an illicit connection, use the compliance strategy in a documented effort to eliminate the illicit connection within 6 months.
All known illicit connections to the MS4 shall be eliminated.
- f. Permittees shall train staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, and illicit connections, to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements or staffing. Permittees shall document and maintain records of the training provided and the staff trained.
- g. Recordkeeping: Each Permittee shall track and maintain records of the activities conducted to meet the requirements of this Section. In the Annual Report, each Permittee shall submit data for the illicit discharges, spills and illicit connections including those that were found by, reported to, or investigated by the Permittee during the previous calendar year. The data shall include the information specified in Appendix 12 and WQWebIDDE. Each Permittee may either use their own system or WQWebIDDE for recording this data. Final submittals shall follow the instructions, timelines, and format as described in Appendix 12.

The City will continue to immediately respond to all IDDE calls, emails, or texts. Based on the type of IDDE, proper follow-up actions will occur and the City will record the pertinent data from the incident response in the NPDES Records Log. The table will be presented as a component of our annual report and published on the City web site.

Based on the type of IDDE, proper follow-up actions will occur. A onetime spill will require citing the offender and collecting reimbursement for the cost of clean-up. If a business is determined to be the source of the IDDE, a site visit will be scheduled and information will be provided on proper BMPs for the site activities to eliminate the IDDE in the future. If the source is a residential property, the owner will be provided with the appropriate BMPs and/or alternatives to reduce the risk of an IDDE in the future.

The City continues to look for opportunities for additional education in the area of IDDE. We budget for training for staff to expand their knowledge in the area of IDDE.

2.6 CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES (S5.C.6)

Each Permittee shall implement and enforce a program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities. The program shall apply to private and public development, including transportation projects.

The minimum performance measures are:

- a. Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects.

Each Permittee shall 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), below, and shall apply to all applications submitted:

- i. **On or after July 1, 2022.**
 - ii. **Prior to January 1, 2017**, that have not started construction by January 1, 2022.
 - iii. **Prior to July 1, 2022**, that have not started construction by July 1, 2027.
- b. The ordinance or other enforceable mechanism shall include, at a minimum:
 - i. The Minimum Requirements, thresholds, and definitions in Appendix 1, or the 2013 Appendix 1 amended to include the changes identified in Appendix 10, or Phase I program approved by Ecology and amended to include Appendix 10, for new development, redevelopment, and construction sites. Adjustment and variance criteria equivalent to those in Appendix 1 shall be included. More stringent requirements may be used, and/or certain requirements may be tailored to local circumstances through the use of Ecology-approved basin plans or other similar water quality and quantity planning efforts. Such local requirements and thresholds shall provide equal protection of receiving waters and equal levels of pollutant control to those provided in Appendix 1.
 - ii. The local requirements shall include the following requirements, limitations, and criteria that, when used to implement the minimum requirements in Appendix 1 (or program approved by Ecology under the 2019 Phase I Permit) will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy the State requirement under Chapter 90.48 RCW to apply AKART prior to discharge:
 - a) Site planning requirements
 - b) BMP selection criteria
 - c) BMP design criteria
 - d) BMP infeasibility criteria
 - e) LID competing needs criteria
 - f) BMP limitations

Permittees shall document how the criteria and requirements will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy State AKART requirements.

Permittees who choose to use the requirements, limitations, and criteria, above, in the Stormwater Management Manual for Western Washington, or a Phase I program approved by Ecology, may cite this choice as their sole documentation to meet this requirement.

- iii. The legal authority, through the approval process for new development and redevelopment, to inspect and enforce maintenance standards for private stormwater facilities approved under the provisions of this Section that discharge to the Permittee's MS4.

The City of Pacific Community Development/Public Works Department (CD/PWD) is responsible for permitting, inspection, and code enforcement actions for construction-related activities in the City.

The permitting process includes review, inspection, and enforcement. All sites that include clearing, grading, other land-disturbing activities, or development must go through the permitting process. This process includes final inspections prior to approval of project construction to ensure proper installation of permanent controls such as stormwater facilities and structural BMPs.

Pacific Municipal Code (PMC) 24.08.100 – adopts the latest version of the King County Surface Water Design Manual, and appendices 1 and 8 of Western Washington Phase II Municipal Stormwater Permit.

The City's updated stormwater regulations clearly identify responsibilities for maintenance, repair, operation, and inspection of private stormwater systems. These responsibilities lie with the property owner.

The City encourages developers to schedule a pre-development conference prior to beginning a project. Staff inform developers and designers of the requirement to implement LID measures when technically feasible.

- c. The program shall include a permitting process with site plan review, inspection and enforcement capability to meet the standards listed in (i) through (iv) below, for both private and public projects, using qualified personnel (as defined in Definitions and Acronyms). At a minimum, this program shall be applied to all sites that meet the minimum thresholds adopted pursuant to S5.C.6.b.i, above.
 - i. Review of all stormwater site plans for proposed development activities.
 - ii. Inspect, prior to clearing and construction, all permitted development sites that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7 – Determining Construction Site Sediment Damage Potential. As an alternative to evaluating each site according to Appendix 7, Permittees may choose to inspect all construction sites that meet the minimum thresholds adopted pursuant to S5.C.6.b.i, above.
 - iii. Inspect all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection.

- iv. Each Permittee shall manage maintenance activities to inspect all stormwater treatment and flow control BMPs/facilities, and catch basins, in new residential developments every six months, until 90% of the lots are constructed (or when construction has stopped and the site is fully stabilized), to identify maintenance needs and enforce compliance with maintenance standards as needed.
 - v. Inspect all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. Verify that a maintenance plan is completed and responsibility for maintenance is assigned for stormwater treatment and flow control BMPs/facilities. Enforce as necessary based on the inspection.
 - vi. Compliance with the inspection requirements in (ii) through (v), above, shall be determined by the presence and records of an established inspection program designed to inspect all sites. Compliance during this permit term shall be determined by achieving at least 80% of required inspections. The inspections may be combined with other inspections provided they are performed using qualified personnel.
 - vii. The program shall 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 maintenance activities shall be maintained.
 - viii. An enforcement strategy shall be implemented to respond to issues of noncompliance.
- d. The program shall make available, as applicable, the link to the electronic Construction Stormwater General Permit Notice of Intent (NOI) form for construction activity and, as applicable, a link to the electronic Industrial Stormwater General Permit NOI form for industrial activity to representatives of proposed new development and redevelopment. Permittees shall continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.
- e. Each Permittee shall ensure that all staff whose primary job duties are implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Follow-up training must be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

The ongoing and planned activities by the City of Pacific include:

- *developing/updating documents and forms to improve the permitting process;*
- *updating City's website to improve stormwater management and regulatory information;*
- *review all stormwater site plans;*
- *provide construction site inspections – The City inspects sites before the start of the construction, during the construction activity in regular intervals and after the completion of the construction;*

- *review and refine the inspection procedures used;*
- *during construction, inspect/enforce TESC measures on projects;*
- *inspection of subdivision stormwater controls during construction period by reviewing and refining the inspection program for residential subdivisions while individual lots are in construction;*
- *distributing copies of the Notice of Intent for construction activity at the City permit counter when requested;*
- *reviewing and revising the PMC regarding Development-Codes, Rules, Standards; and*
- *reviewing and revising other enforceable LID principles and LID BMPs.*

The City will also continue staff training by pursuing training opportunities for development review and inspection staff and conduct internal staff training by leveraging knowledge from City staff who have attended pertinent training courses. The City Stormwater Tech is a Certified Erosion and Sediment Control Lead (CESCL) and Certified Stormwater Inspector and the City Engineer is a Certified Stormwater Inspector and Certified Erosion and Sediment Control Lead (CESCL).

2.7 OPERATIONS AND MAINTENANCE (S5.C.7)

Each Permittee shall implement and document a program to regulate maintenance activities and to conduct maintenance activities by the Permittee to prevent or reduce stormwater impacts.

The City's Municipal Operation and Maintenance program requires inspection of all municipally owned stormwater treatment and flow control and treatment facilities and catch basins, and takes appropriate maintenance actions. The City maintains regular inspections on private and public facilities and inspections are logged in the City's records.

The minimum performance measures are:

- a. Each Permittee shall implement maintenance standards that are as protective, or more protective, of facility function than those specified in the Stormwater Management Manual for Western Washington or a Phase I program approved by Ecology. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard. No later than June 30, 2022, Permittees shall update their maintenance standards as necessary to meet the requirements of this Section.
 - i. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standard between inspections and/or maintenance is not a permit violation.
 - ii. Unless there are circumstances beyond the Permittee's control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:
 - Within 1 year for typical maintenance of facilities, except catch basins.
 - Within 6 months for catch basins.
 - Within 2 years for maintenance that requires capital construction of less than \$25,000.

Circumstances beyond the Permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, the Permittee shall document the circumstances and how they were beyond their control.
- b. Maintenance of stormwater facilities regulated by the Permittee
 - i. The program shall include provisions to verify adequate long-term O&M of stormwater treatment and flow control BMPs/facilities that are permitted and constructed pursuant to S.5.C.6.c and shall be maintained in accordance with S5.C.7.a.

The provisions shall include:

- a) Implementation of an ordinance or other enforceable mechanism that:
 - Clearly identifies the party responsible for maintenance in accordance with maintenance standards established under S5.C.7.a.

- Requires inspection of facilities in accordance with the requirements in (b), below.
 - Establishes enforcement procedures.
- b) Annual inspections of all stormwater treatment and flow control BMPs/facilities that discharge to the MS4 and were permitted by the Permittee according to S5.C.6.c, including those permitted in accordance with requirements adopted pursuant to the 2007-2019 Ecology municipal stormwater permits, unless there are maintenance records to justify a different frequency.

Permittees may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 – Certification and Signature.

- ii. Compliance with the inspection requirements in (b), above, shall be determined by the presence and records of an established inspection program designed to inspect all facilities, and achieving at least 80% of required inspections.
- iii. The program shall 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 maintenance activities shall be maintained.

c. Maintenance of stormwater facilities owned or operated by the Permittee.

- i. Each Permittee shall implement a program to annually inspect all municipally owned or operated stormwater treatment and flow control BMPs/facilities, and taking appropriate maintenance actions in accordance with the adopted maintenance standards.

Permittees may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 – Certification and Signature.

- ii. Each Permittee shall spot check potentially damaged stormwater treatment and flow control BMPs/facilities after major storm events (24 hour storm event with a 10 year or greater recurrence interval). If spot checks indicate widespread damage/maintenance needs, inspect all stormwater treatment and flow control BMPs/facilities that may be affected. Conduct repairs or take appropriate maintenance action in accordance with maintenance standards established above, based on the results of the inspections.

City's storm event preparation, system patrol, and inspection of storm drainage, "Hot Spot" areas are performed by maintenance department crews within 24 hours of notification of a major weather event (24 hour storm event with a 10 year or greater recurrence interval).

- iii. Each Permittee shall inspect all catch basins and inlets owned or operated by the Permittee every two years. Clean catch basins if the inspection indicates cleaning is needed to comply with maintenance standards established in the Stormwater Management Manual for Western Washington. Decant water shall be disposed of in accordance with Appendix 6 – Street Waste Disposal.

The following alternatives to the standard approach of inspecting all catch basins every two years may be applied to all or portions of the system:

- a) The catch basin inspection schedule of every two years may be changed as appropriate to meet the maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records for catch basins, the Permittee may substitute written statements to document a specific, less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experiences and shall be certified in accordance with G19 – Certification and Signature.
- b) Inspections every two years may be conducted on a “circuit basis” whereby 25% of catch basins and inlets within each circuit are inspected to identify maintenance needs. Include an inspection of the catch basin immediately upstream of any MS4 outfall, discharge point, or connections to public or private storm systems, if applicable. Clean all catch basins within a given circuit for which the inspection indicates cleaning is needed to comply with maintenance standards established under S5.C.7.a, above.
- c) The Permittee may clean all pipes, ditches, and catch basins and inlets within a circuit once during the permit term. Circuits selected for this alternative must drain to a single point.
- iv. Compliance with the inspection requirements in S5.C.7.c.i-iii, above, shall be determined by the presence of an established inspection program achieving at least 95% of required inspections.
- d. Implement practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee. No later than December 31, 2022, document the practices, policies, and procedures. Lands owned or maintained by the Permittee include, but are not limited to: streets, parking lots, roads, highways, buildings, parks, open space, road right-of-ways, maintenance yards, and stormwater treatment and flow control BMPs/facilities.

The following activities shall be addressed:

- i. Pipe cleaning
- ii. Cleaning of culverts that convey stormwater in ditch systems
- iii. Ditch maintenance
- iv. Street cleaning
- v. Road repair and resurfacing, including pavement grinding
- vi. Snow and ice control
- vii. Utility installation
- viii. Pavement striping maintenance

- ix. Maintaining roadside areas, including vegetation management
- x. Dust control
- xi. Application of fertilizers, pesticides, and herbicides according to the instructions for their use, including reducing nutrients and pesticides using alternatives that minimize environmental impacts
- xii. Sediment and erosion control
- xiii. Landscape maintenance and vegetation disposal
- xiv. Trash and pet waste management
- xv. Building exterior cleaning and maintenance

The City has and will continue to utilize stormwater field maintenance practices (consistent with Ecology Manual) in place that address the following activities:

- *- inspecting and cleaning detention basins/ponds*
- *- Inspection and cleaning catch basins*
- *- Cleaning stormwater lines*
- *- Cleaning and flushing culverts*
- *- Cleaning and reshaping ditches*
- *- Street sweeping*
- *- Erosion control in water courses*
- *- Stormwater line repair and replacement*
- *- Shoulder pulling*
- *Catch basin inspection and cleaning, culvert flushing, and line cleaning is performed annually by City staff and contractors. There are approximately 1,300 catch basins in the Pacific stormwater system. The City is responsible for maintaining over 800 basins while 500 catch basins are privately owned and maintained. Future maintenance and inspections will continue with annual inspections of the east and west discharge areas (White River / Government Canal and Milwaukee Creek / Soatin Creek). The City budgets \$50,000 annually to accomplish a portion of this component of the Operation & Maintenance program.*
- *Street sweeping is performed by City maintenance staff and is an ongoing activity to reduce stormwater impacts. All street sweepings are separated from green debris and disposed of properly. All excavated spoils from utility operations and street waste are decanted under contract at the City of Auburn facility.*
- *In terms of ongoing record keeping, the City documents significant spills and leaks, dry and wet weather inspections, site modifications, tracks O&M costs, keeps inspection and maintenance repair records, and updates the SWMP plan annually.*
- *The City has developed and implements the Standard Operating Procedures for Stormwater, Streets and Parks Operations and Maintenance.*

- e. Implement an ongoing training program for employees of the Permittee whose primary construction, operations, or maintenance job functions may impact stormwater quality. The training program shall address the importance of protecting water quality, operation and maintenance standards, inspection procedures, relevant SWPPPs, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns. Follow-up training shall be provided as needed to address changes in

procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of training provided. The staff training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance.

The City has and will continue its ongoing training program for City staff that addresses the importance of protecting water quality, the requirements of the phase II permit, operation & maintenance standards, inspection procedures, selecting appropriate BMPs, ways to perform job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns.

- f. Implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in areas subject to this Permit that are not required to have coverage under the Industrial Stormwater General Permit or another NPDES permit that authorizes stormwater discharges associated with the activity. As necessary, update SWPPPs no later than December 31, 2022, to include the following information. At a minimum, the SWPPP shall include:
 - i. A detailed description of the operational and structural BMPs in use at the facility and a schedule for implementation of additional BMPs when needed. BMPs selected must be consistent with the Stormwater Management Manual for Western Washington, or a Phase I program approved by Ecology. The SWPPP must be updated as needed to maintain relevancy with the facility.
 - ii. At minimum, annual inspections of the facility, including visual observations of discharges, to evaluate the effectiveness of the BMPs, identify maintenance needs, and determine if additional or different BMPs are needed. The results of these inspections must be documented in an inspection report or check list.
 - iii. An inventory of the materials and equipment stored on-site, and the activities conducted at the facility which may be exposed to precipitation or runoff and could result in stormwater pollution.
 - iv. A site map showing the facility's stormwater drainage, discharge points, and areas of potential pollutant exposure.
 - v. A plan for preventing and responding to spills at the facility which could result in an illicit discharge.

The City has a developed SWPPP and will continue to update the document as site configuration and operations change.

- g. Maintain records of the activities conducted to meet the requirements of this Section.

The City will continue to track expenses in a spreadsheet log to complete the requirements of the NPDES Permit.

2.8 SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT (S5.C.8)

- a. The Permittee shall implement a program to prevent and reduce pollutants in runoff from areas that discharge to the MS4. The program shall include:
 - i. Application of operational source control BMPs, and if necessary, structural source control BMPs or treatment BMPs/facilities, or both, to pollution generating sources associated with existing land uses and activities.
 - ii. 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.
 - iii. Application and enforcement of local ordinances at sites, identified pursuant to S5.C.8.b.ii, including sites with discharges authorized by a separate NPDES permit. Permittees that are in compliance with the terms of this Permit will not be held liable by Ecology for water quality standard violations or receiving water impacts caused by industries and other Permittees covered, or which should be covered under an NPDES permit issued by Ecology.
 - iv. Practices to reduce polluted runoff from the application of pesticides, herbicides, and fertilizers from the sites identified in the inventory.

The City Adopted Ordinance No. 1949, in 2017, which forms parts of PMC 24 and provides the structural framework to address stormwater management issues.

The City has compiled a list of all commercial sites. All identified sites with a business address are in the process of inspection that may generate pollutants and source control requirements applicable to those activities.

The Public Works Department and Code Enforcement will continue to work together to monitor site activities throughout the jurisdiction. Utilizing allowable code enforcement policies and procedures the City will provide property owners with recommended BMPs to return to compliance with the regulations.

The City will only use certified staff to apply pesticide, herbicides, and fertilizers per State recommended guidelines. The City will provide information to the public through social media and public events on the proper use of pesticide, herbicides, and fertilizers and natural gardening techniques. The City will develop a mailer for businesses in the city limits with education materials on the proper use of pesticides, herbicides, and fertilizers.

- b. Minimum performance measures:
 - i. No later than August 1, 2022, Permittees shall adopt and make effective an ordinance(s), or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities (see Appendix 8 to identify pollutant generating sources).

The requirements of this subsection are met by using the source control BMPs in the SWMMWW, or a Phase I Program approved by Ecology. In cases where the manual(s) lack guidance for a specific source of pollutants, the Permittee shall work with the owner/operator to implement or adapt BMPs based on the best professional judgement of the Permittee.

Applicable operational source control BMPs shall be required for all pollutant generating sources. Structural source control BMPs, or treatment BMPs/facilities, or both, shall be required for pollutant generating sources if operational source control BMPs do not prevent illicit discharges or violations of surface water, groundwater, or sediment management standards because of inadequate stormwater controls. Implementation of source control requirements may be done through education and technical assistance programs, provided that formal enforcement authority is available to the Permittee and is used as determined necessary by the Permittee, in accordance with S5.C.8.b.iv, below.

The City adopted an Ordinance requiring the application of source control BMPs for pollutant-generating sources associated with existing land uses and activities. This will be developed by creating a database of business properties and uses. Some existing businesses clearly fall within the existing predefined BMP schedules in the Stormwater Management Manual for Western Washington Volume IV.

Those businesses that do not meet the existing operational predefined schedules will require discussion of operations activities and may require using the BMPs from multiple schedules.

- ii. **No later than August 1, 2022**, the 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. The inventory shall include:
- a) Businesses and/or sites identified based on the presence of activities that are pollutant generating (refer to Appendix 8).
 - b) Other pollutant generating sources, based on complaint response, such as:
 - home-based businesses and
 - multi-family sites.

The City adopted an Ordinance requiring the application of source control BMPs for pollutant-generating sources associated with existing land uses and activities. This is developed by creating a database of all business properties, including home based businesses and the business activities.

- iii. **No later than January 1, 2023**, Permittees shall implement an inspection program for sites identified pursuant to S5.C.8.b.ii, above.
- a) All identified sites with a business address shall be provided information about activities that may generate pollutants and the source control requirements applicable to those activities. This information shall be provided by mail, telephone, electronic communications, or in person. This information may be provided all at one time or spread out over the permit term to allow for tailoring and distribution of the information during site inspections.
 - b) The Permittee shall annually complete the number of inspections equal to 20% of the businesses and/or sites listed in their source control inventory to assess BMP effectiveness and compliance with source control requirements. The Permittee may count follow-up compliance inspections at the same site toward the 20% inspection rate. The Permittee may select which sites to inspect each year and is not required to inspect 100% of sites over a 5-year period. Sites may be prioritized for inspection based on their land use category, potential for pollution generation, proximity to receiving waters, or to address an identified pollution problem within a specific geographic area or sub-basin.
 - c) Each Permittee shall inspect 100% of sites identified through credible complaints.
 - d) Permittees may count inspections conducted based on complaints, or when the property owner denies entry, to the 20% inspection rate.

The City has developed a database of businesses and their primary activities. We will contact the businesses to identify the current SIC code they are operating under. Letters will be mailed to business owners of required BMPs for the type of business they operate. Site inspections will follow the Permit schedule with at least 20% of sites inspected each year, per the standards listed above. If a complaint is received for any site, the City responds immediately.

- iv. **No later than January 1, 2023**, each Permittee shall implement a progressive enforcement policy that requires sites to comply with stormwater requirements within a reasonable time period as specified below:
- a) If the Permittee determines, through inspections or otherwise, that a site has failed to adequately implement required BMPs, the Permittee shall take appropriate follow-up action(s), which may include phone calls, reminder letters, emails, or follow-up inspections.

- b) When a Permittee determines that a site has failed to adequately implement BMPs after a follow-up inspection(s), the Permittee shall take enforcement action as established through authority in its municipal codes or ordinances, or through the judicial system.
 - c) Each Permittee shall maintain records, including documentation of each site visit, inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating an effort to bring sites into compliance. Each Permittee shall also maintain records of sites that are not inspected because the property owner denies entry.
 - d) A Permittee may refer non-emergency violations of local ordinances to Ecology, provided, the Permittee also makes a documented effort of progressive enforcement. At a minimum, a Permittee's enforcement effort shall include documentation of inspections and warning letters or notices of violation.
- v. Permittees shall train staff who are responsible for implementing the source control program to conduct these activities. The ongoing training program shall cover the legal authority for source control, source control BMPs and their proper application, inspection protocols, lessons learned, typical cases, and enforcement procedures. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staff. Permittees shall document and maintain records of the training provided and the staff trained.

The City trained and will continue to train staff to perform their duties as required under the Permit. The City will cross train to have multiple employees able to perform the required duties.

2.9 COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS (S7)

The following requirements apply if an applicable TMDL is approved for stormwater discharges from MS4s owned or operated by the Permittee. Applicable TMDLs are TMDLs which have been approved by EPA on or before the issuance date of this Permit or prior to the date that Ecology issues coverage under this Permit, whichever is later.

- A. For applicable TMDLs listed in Appendix 2, affected Permittees shall comply with the specific requirements identified in Appendix 2. Each Permittee shall keep records of all actions required by this Permit that are relevant to applicable TMDLs within their jurisdiction. The status of the TMDL implementation shall be included as part of the annual report submitted to Ecology. Each annual report shall include a summary of relevant SWMP and Appendix 2 activities conducted in the TMDL area to address the applicable TMDL parameter(s).
- B. For applicable TMDLs not listed in Appendix 2, compliance with this Permit shall constitute compliance with those TMDLs.
- C. For TMDLs that are approved by EPA after this Permit is issued, Ecology may establish TMDL related permit requirements through future permit modification if Ecology determines implementation of actions, monitoring, or reporting necessary to demonstrate reasonable further progress toward achieving TMDL waste load allocations, and other targets, are not occurring and shall be implemented during the term of this Permit or when this Permit is reissued. Permittees are encouraged to participate in development of TMDLs within their jurisdiction and to begin implementation.

The City regularly checks publications for TMDL requirements for the White River in State documents. The current NPDES permit does not have TMDL requirements applicable to the City. Specifically, we are concerned about the lower White River to verify what TMDL restrictions are present and which activities may impact discharges from the City into the White River or its tributaries: Government Canal and Soaten Creek.

The City will continue to monitor for new requirements. Additionally, the City will work with regional partners to remain aware of any new requirements.

2.10 MONITORING AND ASSESSMENT (S8)

A. Regional Status and Trends Monitoring

1. All Permittees that chose S8.B Status and Trends Monitoring Option #1 in the Phase II Western Washington Municipal Stormwater Permit, August 1, 2013 – July 31, 2018 (extended to July 31, 2019), shall make a one-time payment into the collective fund to implement regional small streams and marine nearshore areas status and trends monitoring in Puget Sound. This payment is due on or before December 1, 2019. Submit payment according to Section S8.D, below.
2. All City and County Permittees covered under the Phase II Western Washington Municipal Stormwater Permit, August 1, 2013 – July 31, 2018 (extended to July 31, 2019), except the Cities of Aberdeen and Centralia, shall notify Ecology in writing which of the following two options for regional status and trends monitoring (S8.A.2.a or S8.A.2.b) the Permittee chooses to carry out during this permit term. The written notification with G19 signature is due to Ecology no later than December 1, 2019.
 - a. Make annual payments into a collective fund to implement regional receiving water status and trends monitoring of either: small streams and marine nearshore areas in Puget Sound; or, urban streams in Clark and Cowlitz Counties in the Lower Columbia River basin, depending on the Permittee's location. The annual payments into the collective fund are due on or before August 15 each year beginning in 2020. Submit payments according to Section S8.D, below.

The City does not have the staff or the technical abilities to prepare a Monitoring or Assessment Program as required by the Permit. Therefore, the City of Pacific has in the past and will continue in the future to pay into the Regional Stormwater Monitoring Program to meet the requirements of this permit condition.

Or

- b. Conduct stormwater discharge monitoring per the requirements in S8.C.
Either option will fully satisfy the Permittee's obligations under this Section (S8.A.2). Each Permittee shall select a single option for this permit term.

B. Stormwater Management Program (SWMP) Effectiveness and Source Identification Studies

1. All Permittees that chose S8.C Effectiveness Studies Option #1 in the Phase II Western Washington Municipal Stormwater Permit, August 1, 2013 – July 31, 2018 (extended to July 31, 2019), shall make a one-time payment into the collective fund to implement effectiveness studies and source identification studies. The payment is due on or before December 1, 2019. Submit payment according to Section S8.D, below.

2. All City and County Permittees covered under the Phase II Western Washington Municipal Stormwater Permit, August 1, 2013 – July 31, 2018 (extended to July 31, 2019), shall notify Ecology in writing which of the following two options (S8.B.2.a or S8.B.2.b) for effectiveness and source identification studies the Permittee chooses to carry out during this permit term. The written notification with G19 signature is due to Ecology no later than December 1, 2019.
 - a. Make annual payments into a collective fund to implement effectiveness and source identification studies. The annual payments into the collective fund are due on or before August 15 each year beginning in 2020. Submit payments according to Section S8.D, below.

The City of Pacific has elected to pay into the Regional Stormwater Monitoring Program to meet the requirements of this permit condition. The required annual amount for S8.B (Stormwater Management Program Effectiveness and Source Identification Studies).

Or

- b. Conduct stormwater discharge monitoring per the requirements in S8.C. Either option will fully satisfy the Permittee's obligations under this Section (S8.B.2). Each Permittee shall select a single option for this permit term.
3. All Permittees shall provide information as requested for effectiveness and source identification studies that are under contract with Ecology as active Stormwater Action Monitoring (SAM) projects. These requests will be limited to records of SWMP activities and associated data tracked and/or maintained in accordance with S5 – Stormwater Management Program for Cities, Towns, and Counties and/or S9 – Reporting Requirements. A maximum of three requests during the permit term from the SAM Coordinator will be transmitted to the Permittee's permit coordinator via Ecology's regional permit manager. The Permittee shall have 90 days to provide the requested information.

C. Stormwater discharge monitoring.

1. This Section applies only to Permittees who choose to conduct stormwater discharge monitoring per S8.A.2.b and/or S8.B.2.b in lieu of participation in the regional status and trends monitoring and/or effectiveness and source identification studies. These Permittees shall conduct monitoring in accordance with Appendix 9 and an Ecology approved Quality Assurance Project Plan (QAPP) as follows:
 - a. Permittees who choose the option to conduct stormwater discharge monitoring for either S8.A.2 or S8.B.2 shall monitor three independent discharge locations.

Permittees who choose the option to conduct stormwater discharge monitoring for both S8.A.2 and S8.B.2 shall conduct this monitoring at a total of six locations; at least four locations shall be independent (one location may be nested in another basin).

- b. No later than February 1, 2020, each Permittee shall submit to Ecology a draft stormwater discharge monitoring QAPP for review and approval. The QAPP shall be prepared in accordance with the requirements in Appendix 9. The final QAPP shall be submitted to Ecology for approval as soon as possible following finalization, and before August 15, 2020 or within 60 days of receiving Ecology's comments on the draft QAPP (whichever is later).
- c. Flow monitoring shall begin no later than October 1, 2020 or within 30 days of receiving Ecology's approval of the final QAPP (whichever is later). Stormwater discharge monitoring shall be fully implemented no later than October 1, 2021.
- d. Data and analyses shall be reported annually in accordance with the Ecology approved QAPP. Each Permittee shall enter into the Department's Environmental Information Management (EIM) database all water and solids concentration data collected pursuant to Appendix 9.

This sub-section of the Permit is not applicable to the City of Pacific, therefore there are no planned activities.

D. Payments into the collective funds.

- 1. Each Permittee's S8.A and S8.B payment amounts are listed in Appendix 11 and in the invoices that will be sent to the Permittee approximately three months in advance of each payment due date.
- 2. Mail payments according to the instructions in the invoice, or via United States Postal Service to:

Department of Ecology Cashiering Unit
P.O. Box 47611
Olympia, WA 98405-7611