NPDES Phase II Municipal Stormwater Management Program Plan

Prepared for

February 2021

Prepared by

Parametrix

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Prepared for

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CERTIFICATION

The technical material and data contained in this document were prepared under the supervision and direction of the undersigned, whose seal, as a professional engineer licensed to practice as such, is affixed below.

2/26/2021

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KEY TERMS

AKART	all known, available and reasonable methods of treatment
Basin Plan	Mid-Puyallup Basin Plan
BMP	Best Management Practice
CAD	Computer Aided Design
CESCL	Certified Erosion and Sediment Control Lead
City	City of Orting
Ecology Manual	Stormwater Management Manual for Western Washington
Ecology	Washington State Department of Ecology
GIS	Geographic Information System
Group	Orting Stormwater Public Input Group
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
OMC	Orting Municipal Code
PCD	Pierce Conservation District
Permit	Western Washington Phase II Municipal Stormwater Permit
Plan	SWMP Plan
SMAP	Stormwater Management Action Planning
SWPPPs	Stormwater Pollution Prevention Plans
TMDL	Total Maximum Daily Load
USGS	U.S. Geological Survey
WWTP	wastewater treatment plant

1. INTRODUCTION

1.1 Overview and Background

The Western Washington Phase II Municipal Stormwater Permit (Permit) is issued by the Washington State Department of Ecology (Ecology) under the National Pollutant Discharge Elimination System (NPDES). Permit Section S5 requires permittees to develop and implement a Stormwater Management Program (SWMP). Section S5 also requires permittees to prepare written documentation of the SWMP, which is referred to as the SWMP Plan (Plan).

This document is an update to the previous version of the City of Orting (City) 2019 SWMP Plan. This document reflects requirements from the Western Washington Phase II Municipal Stormwater Permit (Permit) for the August 1, 2019 through July 31, 2024 Permit term. The elements required for the SWMP Plan are based on Permit Section S5, which is included in Appendix A. SWMP Plan requirements include Items 1 through 8 of listed below. Items 9 through 11 are also included as they are items to be addressed as part of the SWMP.

1. Stormwater Planning
2. Public Education and Outreach
3. Public Involvement and Participation
4. Municipal Separate Storm Sewer System (MS4) Mapping and Documentation
5. Illicit Discharge Detection and Elimination
6. Controlling Runoff from New Development, Redevelopment, and Construction Sites
7. Operations and Maintenance
8. Source Control for Existing Development
9. Applicable measures of Permit Section S4 – Compliance with Standards
10. Applicable requirements of Permit Section S7 – Compliance with Total Maximum Daily Load (TMDL) Requirements
11. Applicable requirements of Permit Section S8 – Monitoring and Assessment

The Permit requires the City to report annually (March 31 of each year) on progress in SWMP implementation for the prior year. The Permit also requires submittal of documentation that describes proposed SWMP activities for the coming year. Implementation of various conditions of the current Permit are being phased throughout the 5-year Permit term from July 1, 2019 through July 31, 2024.

This report updates the City's 2019 SWMP Plan through January 31, 2021, to comply with Section 5 of the Permit. This 2020 SWMP Plan update describes actions the City is taking to maintain permit compliance.

1.2 Phased Implementation of Permit Requirements

The current Permit was issued July 1, 2019 and effective August 1, 2019. The current Permit will expire on July 31, 2024.

Ecology is phasing in many of the Permit requirements over the Permit term. A table summarizing the implementation dates is included in Appendix B. The SWMP Plan is required to be updated at least annually and submitted with the annual reports, which are due on March 31st of each year. The annual SWMP Plan update is to describe:

1. Planned activities for each of the SWMP Plan components;
2. Any additional planned actions required by Permit Section S7 – Compliance with Total Maximum Daily Load Requirements; and
3. Any additional planned actions required by Permit Section S8 – Monitoring and Assessment.

As required by the Permit, the City must:

1. Submit an annual report documenting Permit compliance activities for the previous calendar year on March 31st of each year, including the updated, current SWMP Plan.
2. Keep all records related to the Permit and the SWMP Plan for at least 5 years in accordance with Permit Section S9.B.
3. Make all records related to the Permit and the SWMP Plan available to the public in accordance with the provisions of Permit Section S9.C.

Additional Permit information is located on Ecology's website:

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

1.3 Document Organization

The content in this document is based upon Permit requirements and Ecology's *Draft Guidance for City and County Annual Reports for Western Washington Phase II Municipal Stormwater Permits*. The remainder of the SWMP Plan is organized similarly to the Permit:

- Section 2 address Permit requirements for Stormwater Planning.
- Section 3 addresses Permit requirements for Public Education and Outreach.
- Section 4 addresses Permit requirements for Public Involvement and Participation.
- Section 5 addresses Permit requirements for MS4 Mapping and Documentation.
- Section 6 addresses Permit requirements for Illicit Discharge Detection and Elimination.
- Section 7 addresses Permit requirements for Controlling Runoff from New Development, Redevelopment, and Construction Sites.
- Section 8 addresses Permit requirements for Municipal Operations and Maintenance.
- Section 9 addresses Permit requirements for Source Control Program for Existing Development.
- Section 10 addresses Permit requirements for Permit Section S4 – Compliance with Standards.
- Section 11 addresses Permit requirements for Permit Section S7 – Compliance with TMDL Requirements.
- Section 12 addresses Permit requirements for Permit Section S8 – Monitoring and Assessment.

Each section includes a summary of the relevant Permit requirements and a description of actions in 2019 and 2020 and planned compliance activities.

This SWMP Plan is based on the following Permit terms:

- Permit with effective date of February 16, 2007, and expiration date of February 15, 2012 (2007 Permit);
- Permit with effective date of August 1, 2013, and expiration date of July 31, 2018 (2013 Permit);
- Current Permit with effective date of August 1, 2019, and expiration date of July 31, 2024.

2. STORMWATER PLANNING

Stormwater planning is required as part of the SWMP in accordance with Permit Section S5.C. The purpose of the stormwater planning is to "inform and assist in the development of policies and strategies as water quality management tools to protect receiving waters." Key components of stormwater planning are summarized below. Excerpts from the Permit with the stormwater planning requirements are included in Appendix A.

2.1 Interdisciplinary Team

(Permit Section S5.C.1.a)

The Permit requires that an interdisciplinary team be formed to "inform and assist in the development, progress and influence of the SWMP. The team is to be identified by August 1, 2020. The team includes two City Council members, the City Administrator, the Public Works Director and the City Planner. The team meets once a month. The team has coordinated in the preparation of this SWMP.

2.2 Coordination with Long-Term Plans

(Permit Section S5.C.1.b)

The Permit requires that stormwater management needs and protection and/or improvement of receiving waters are being considered with long-term land use plans. The intent is for land use, growth, and transportation plans be developed that considers how such planning can support stormwater, water quality, and watershed issues.

There are two deadlines associated with the Permit-required coordination:

- By March 31, 2021, the City is to 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 current Permit term in updates to the City's Comprehensive Plan or other applicable plans.
- By January 1, 2023, the City is to submit a report responding to the same questions from the March 31, 2021 annual report to describe how anticipated stormwater impacts on water quality were addressed, if at all, during the current Permit term in updates to the City's Comprehensive Plan or other applicable plans.

The City's current Comprehensive Plan and Shoreline Master Plan do consider stormwater and receiving water issues. The City will review those plans as it responds to the Stormwater Planning questions for the annual report due March 31, 2021. The City is planning to update its Comprehensive Plan in 2022 and Shoreline Management Plan when needed. Any changes to those plans based on further consideration of stormwater or receiving water issues will be addressed in the report due January 1, 2023.

2.3 Low-Impact Development Code-Related Requirements

(Permit Section S5.C.1.c)

The intent of this Permit section is to make Low-Impact Development (LID) the preferred and commonly used approach to site development through requiring the use of LID principles and LID Best Management Practice (BMP) when updating, revising, and developing development-related codes, rules, standards, or other enforceable documents. The City has updated its codes and standards to implement LID during prior Permit terms. In accordance with Permit Section S5.C.1.c(a), the City is to assess and document annually any newly identified administrative or regulatory barriers to the implementation of LID principles or LID BMPs.

There were no administrative or regulatory barriers to implementing LID principles or LID BMPs identified in the March 31, 2019 annual report. Barriers, if identified, will be documented in future annual reports.

2.4 Stormwater Management Action Planning

(Permit Section S5.C.1.d)

Stormwater Management Action Planning (SMAP) is a new requirement under the current Permit. SMAP is to be conducted based on the *Stormwater Management Action Planning Guidance* (Ecology, 2019; Publication 19-10-010). The intent is to identify a high-priority watershed within the permittee's jurisdiction and consider how long-range planning and potential projects may help improve stormwater quality and receiving water quality and habitat. The SMAP can be completed by the permittee or in conjunction with other agencies, provided that the SMAP includes a catchment area within the permittee's jurisdiction.

SMAP resources to be used in conjunction with Ecology's *Stormwater Management Action Planning Guidance* are listed below:

- *Building Cities in the Rain; Watershed Prioritization for Stormwater Retrofits* (Washington State Department of Commerce, Publication 006; September 2016).
- Puget Sound Watershed Characterization Project (Ecology).
- https://ecology.wa.gov/Water-Shorelines/Puget-Sound/Watershed-characterization-project.
- Washington Environmental Health Disparities Map (Washington State Department of Health).
- https://www.doh.wa.gov/DataandStatisticalReports/WashingtonTrackingNetworkWTN/InformationbyLocation/WashingtonEnvironmentalHealthDisparitiesMap.
- EJSCREEN: Environmental Justice Screening and Mapping Tool (United States Environmental Protection Agency).
- https://www.epa.gov/ejscreen.

The City is included in the Mid-Puyallup Basin, which is part of the Puyallup-White River Basin. Pierce County leads the watershed planning for the Mid-Puyallup Basin. The Mid-Puyallup Basin Plan (Basin Plan) was adopted in 2005 and acts as a comprehensive guide to surface water management in areas in the Mid-Puyallup Basin. The City is an identified stakeholder in the Basin Plan. The Basin Plan will be one of the resources used for SMAP.

2.4.1 Receiving Water Assessment

(Permit Section S.5.C.1.d.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 SMAP.

By March 31, 2022, the City is to submit:

1. A watershed inventory and a brief description of the relative conditions of the receiving waters and the contributing areas. The watershed inventory is to 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 City's jurisdiction.
2. The findings of the stormwater management influence assessment for each basin.
3. The receiving waters that will be included in the prioritization process if not all of the receiving waters will be included in the prioritization process.
4. A map of the delineated basins with references to the watershed inventory table.
5. The basins that are expected to have a relatively low stormwater management Influence for SMAP. Basins having relatively low-expected stormwater management influence do not need to be included in the prioritization process or the SMAP.

The City has not yet started the receiving water assessment but will do so by March 31, 2022.

2.4.2 Receiving Water Prioritization

(Permit Section S5.C.1.d.ii)

Based on the assessment and other relevant information, permittees are to 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. The retrofits and actions are to 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.

By June 30, 2022, the City is to document the prioritized and ranked list of receiving waters. The City is also to document the process used to identify the high-priority receiving waters. Watershed management plans can be used as sources of information for the prioritization process. The ranking process is to identify the selected priority catchment area to be used for the SMAP.

The City has not yet started the receiving water prioritization but will do so by June 30, 2022.

2.4.3 SMAP

(Permit Section S5.C.1.d.iii)

By March 31, 2023, the City is to develop a SMAP for at least one high-priority catchment area selected above that includes the following:

1. A description of the stormwater facility retrofits needed for the catchment area, BMPs, and preferred locations.
2. Land management/development strategies and/or actions identified for water quality management.
3. Targeted, enhanced, or customized implementation of stormwater management actions from Permit Section S5, including the following. The identified actions can support the selected catchment area or the basin overall:
    a. IDDE field screening,
    b. Prioritization of Source Control inspections,
    c. O&M inspections or enhanced maintenance, or
    d. Public Education and Outreach behavior change programs.
4. Identification of changes needed, if applicable, to local long-range plans to address SMAP priorities.
5. A proposed implementation schedule and budget sources for:
    a. Short-term actions to be accomplished within 6 years, and
    b. Long-term actions to be accomplished within 7 to 20 years).
6. A process and schedule to provide future assessment and feedback to improve the planning process and implementation of procedures or projects.

The City has not started the SMAP process for a prioritized catchment area or established funding for short- or long-term actions but will do so by March 31, 2023.

3. PUBLIC EDUCATION AND OUTREACH

The 2007 Permit required permittees to develop a public education and outreach program by February 15, 2009. Per the 2007 Permit, the public education and outreach program must target the general public, businesses, homeowners and property managers, engineers, contractors, developers, review staff, and land use planners. Additionally, the City is required to track and maintain records of public education and outreach activities. This chapter summarizes the activities that the City is undertaking to meet the requirements of this portion of the Permit.

The City developed a public education and outreach program in conjunction with the 2010 SWMP Plan. The design of the education and outreach program is to reduce or eliminate behaviors that contribute to adverse stormwater impacts. It should also encourage the public to participate in stewardship programs. The subsections below include the 2010 public education and outreach program with 2019 updates to be in conformance with the current Permit.

3.1 Current Public Education and Outreach Program

(Permit Requirement S5.C.2)

The City has an ongoing public education and outreach program. This program is comprised of a variety of approaches, which includes providing educational literature, staffing outreach kiosks at community events, conducting talks and training, as well as partnerships with groups such as The Puyallup River Watershed Council. With regards to literature, the City has drafted outreach materials to educate both the general public and businesses. These materials deal with general BMPs for stormwater runoff and preventing illicit discharges into the stormwater system. The City maintains literature related to stormwater at the City's library that is available for check out by the general public.

The City regularly performs outreach at community events including fairs and festivals. City staff members work at information booths to provide public education regarding environmental matters including stormwater. The City regularly provides outreach at the following City events: Daffodil Parade, Summer Fest, Pumpkin Fest, the Emergency Preparedness Fair, and the Western Washington Fair. The City is a member of the Pierce Conservation District (PCD) and regularly participates with the PCD at the Western Washington Fair. The PCD booth informs people about work the PCD does including Farm Planning and Agricultural Assistance, Water Quality Improvement and Monitoring, Habitat Improvement and Environmental Education, and Harvest Pierce County. At events in August and October of 2008, the City used the information booth approach as a venue to issue its first stormwater management survey. The survey will be discussed in greater detail in the following section.

In the summer of 2019, the City mailed out a stormwater letter and questionnaire to all water utility customers in the City. The results of the 2019 survey are discussed in Section 3.3.2 below.

City staff members provide training and education to the community via both the telephone and on-site visits. City staff provide stormwater education during visits to homes, businesses, and construction sites. At construction sites, City staff instruct workers on proper erosion control and best management practices. Additionally, to further educate the general public and to prevent illicit discharges to storm drains, the City now requires that all new storm drains be stenciled "Dump No Waste, Drains to Stream."

The City is committed to community stormwater education at the student level as well. City staff give talks to students regarding erosion and other stormwater-related issues.

3.2 Creating Stewardship Opportunities

(Permit Requirement S5.c.2)

The City provides a means for the community to be involved in volunteer programs. This is important in fostering a sense of ownership so that the community actively participates in improving and maintaining the quality of the City's stormwater.

3.2.1 Volunteer Programs

Catch Basin/Curb Marking Program – The City has a catch basin/curb marking program in which volunteer groups mark catch basins and storm drains with signage indicating that the structure drains to a nearby surface water body. This program improves public awareness regarding stormwater pollution and its impact on surface waters and supplements the City's ongoing program of marking storm drains with "Dump No Waste, Drains to Stream."

Stream Clean-Ups – City staff members organize an annual Spring River Clean-Up. This event utilizes volunteers to clean up near-stream areas. Flyers are distributed to businesses and the high school, event details are published on the City website, and information is displayed on the reader-board to promote interest in the event. The river cleanup event not only improves the water quality and aquatic habitats of the Puyallup and Carbon Rivers, but it also serves as a useful tool in demonstrating to the community the connection between pollution and surface water quality. In 2018, a fisherman organization arranged their own river cleanup, so the City did not sponsor one.

Car Wash Program – The City has purchased an environmentally friendly carwash kit, which it provides to groups performing car washing events. The carwash kits have brochures about fish-friendly car washes. The kit includes a catch-basin insert to prevent wash water from entering storm drains. It also includes a pump to transport wash water to either nearby grassy areas or the sanitary sewer. The City also requires the use of non-toxic, biodegradable, or phosphate-free soaps.

3.2.2 Future Volunteer Programs

Rainfall Monitoring Program – Currently, the City's wastewater treatment plant (WWTP) has rainfall monitoring equipment. Additionally, the U.S. Geological Survey (USGS) has a rain gauge on the Carbon River. In the future, volunteers could be utilized to collect rainfall data at various locations within the city. By combining data from across the City, rainfall patterns could be analyzed and used to identify areas susceptible to erosion, as well as for flooding prediction and modeling.

Noxious Weed Control – The City is a member of the Pierce Conservation District, with the properties within the City being assessed yearly in property taxes. With this program, the citizens can participate in volunteer events to remove noxious/invasive vegetation from riparian areas. Removal of noxious vegetation improves riparian and aquatic habitat and improves overall water quality. Additionally, it teaches participants the benefits of healthy, native riparian vegetation in improving water quality.

3.3 Measuring Program Effectiveness

(*Permit Requirement S5.C.2.a.ii(b)*)

The Permit requires that a permittee must assess the effectiveness of its public education and outreach program. In August of 2008, the City developed a survey to measure the baseline understanding of stormwater-related issues by various groups within the City. The survey collected demographic information and asked survey respondents a series of twelve questions related to stormwater issues. The survey was administered to a group of business owners at a Chamber of Commerce meeting in

August 2008, to the general public at community events in August and October 2008, and via the City's annual Stormwater Letter in October 2008. Surveys were collected and scored using a rating system. Data from scored surveys was entered into an Excel spreadsheet for analysis and report generation. The City used the results to direct education and outreach sources most effectively and evaluate changes in adoption of the targeted behaviors.

The City performed the survey again in 2020. The results are discussed in Section 3.3.2 below.

3.3.1 Survey Results

Results from the 2008 stormwater survey are summarized in Table 3-1. The survey identified existing levels of knowledge for many stormwater-related matters. The findings of the survey have been used to identify current and future needs for stormwater education and outreach.

Table 3-1. 2008 City of Orting Stormwater Survey Results

Q1.	**Do you know if there is a river, creek or other waterbody near your home or business?**				
	Yes	**No**	**Not Sure**	**No Response**	
	87%	7%	4%	2%	
Q2.	**If you have a river, creek or other waterbody near your home or business, what term(s) best describe your opinion of its water quality?**				
	Very Good	**Somewhat Good**	**Bad**	**Not Sure**	**Not Sure**
	26%	37%	9%	17%	11%
Q3.	**Have you used a pesticide or weed-killer in the last year at your home or business?**				
	Yes	**No**	**No Response**		
	56%	43%	2%		
Q4.	**If you did use a pesticide or weed-killer within the last year, how did you dispose of the remainder of it?**				
	None Left	**Remainder Stored**	**Taken to Hazwaste**	**Other**	**No Response**
	58%	23%	0%	7%	10%
Q5.	**Do you have a pet at home that you take for regular walks outside?**				
	Yes	**No**	**No Response**		
	43%	54%	4%		
Q6.	**If you do have a pet at home you take for regular walks, how do you dispose of pet waste?**				
	Bagged	**Left in Place**	**No Response**		
	60%	32%	8%		
Q7.	**Do you change your own vehicle oil at home?**				
	Yes	**No**	**No Response**		
	22%	76%	2%		
Q8.	**If you do you change your own vehicle oil at home, how do you dispose of your used oil?**				
	Household Waste Collection	**Garbage**	**Ground**	**Other**	**No Response**
	31%	0%	0%	69%	8%

Q9. Do our community's storm drains and sewer system share the same underground pipe system?		
Yes	**No**	**No Response**
6%	78%	17%

Q10. Do water and other substances that flow through storm drains go to a treatment plant to be processed to remove pollutants?		
Yes	**No**	**No Response**
33%	50%	17%

Q11. Do you know of any stormwater detention ponds near your home or business?		
Yes	**No**	**No Response**
43%	52%	6%

Q12. What type of treatment do you believe that stormwater receives after it leaves a stormwater detention pond?			
Treatment Plant	**Direct Discharge**	**Natural Filtration**	**No Response**
20%	11%	48%	19%

In order to measure the effectiveness of the stormwater public education and stormwater program, the City issued its questionnaire again in the fall of 2009. Since 2009, the survey has been set out at many City events, but there is a lack of interest to take the time to complete it. The results of the 2009/2010 stormwater survey are summarized in Table 3-2. The results were compared to the 2008 results to identify if audience behaviors and/or understanding of stormwater-related issues have measurably improved since issuance of the 2008 survey. The results of this comparison were used to direct needs for future public education and outreach activities.

Table 3-2. 2009/2010 City of Orting Stormwater Survey Results

Q1. Do you know if there is a river, creek or other waterbody near your home or business?			
Yes	**No**	**Not Sure**	**No Response**
79%	11%	11%	0%

Q2. If you have a river, creek or other waterbody near your home or business, what term(s) best describe your opinion of its water quality?				
Very Good	**Somewhat Good**	**Bad**	**Not Sure**	**No Response**
42%	21%	0%	32%	5%

Q3. Have you used a pesticide or weed-killer in the last year at your home or business?		
Yes	**No**	**No Response**
58%	42%	0%

Q4. If you did use a pesticide or weed-killer within the last year, how did you dispose of the remainder of it?				
None Left	**Remainder Stored**	**Taken to Hazwaste**	**Other**	**No Response**
21%	26%	21%	5%	26%

Q5. Do you have a pet at home that you take for regular walks outside?		
Yes	**No**	**No Response**
58%	42%	0%

Q6. If you do have a pet at home you take for regular walks, how do you dispose of pet waste?		
Bagged	**Left in Place**	**No Response**
53%	16%	32%

Q7. Do you change your own vehicle oil at home?		
Yes	**No**	**No Response**
47%	53%	0%

Q8. If you do you change your own vehicle oil at home, how do you dispose of your used oil?				
Household Waste Collection	**Garbage**	**Ground**	**Other**	**No Response**
11%	11%	11%	21%	47%

Q9. Do our community's storm drains and sewer system share the same underground pipe system?		
Yes	**No**	**No Response**
21%	88%	21%

Q10. Do water and other substances that flow through storm drains go to a treatment plant to be processed to remove pollutants?		
Yes	**No**	**No Response**
42%	32%	26%

Q11. Do you know of any stormwater detention ponds near your home or business?		
Yes	**No**	**No Response**
53%	42%	5%

Q12. What type of treatment do you believe that stormwater receives after it leaves a stormwater detention pond?			
Treatment Plant	**Direct Discharge**	**Natural Filtration**	**No Response**
26%	11%	53%	11%

3.3.2 Future Program Measurement

The City issued its questionnaire again in the summer of 2019. The results of the 2020 stormwater survey are summarized in Table 3-3. The results will be used by the City to direct needs for future public education and outreach activities.

Table 3-3. 2020 City of Orting Stormwater Survey Results

Q1. Do you know if there is a river, creek or other waterbody near your home or business?			
Yes	**No**	**Not Sure**	**No Response**
86%	8%	1%	5%

Q2. If you have a river, creek or other waterbody near your home or business, what term(s) best describe your opinion of its water quality?				
Very Good	**Somewhat Good**	**Bad**	**Not Sure**	**No Response**
40%	27%	3%	30%	0%

Q3. Have you used a pesticide or weed-killer in the last year at your home or business?		
Yes	**No**	**No Response**
53%	43%	4%

Q4. If you did use a pesticide or weed-killer within the last year, how did you dispose of the remainder of it?

None Left	Remainder Stored	Taken to Hazwaste	Other	No Response
24%	27%	3%	33%	14%

Q5. Do you have a pet at home that you take for regular walks outside?

Yes	No	No Response
31%	63%	6%

Q6. If you do have a pet at home you take for regular walks, how do you dispose of pet waste?

Bagged	Left in Place	No Response
36%	1%	63%

Q7. Do you change your own vehicle oil at home?

Yes	No	No Response
14%	77%	9%

Q8. If you do you change your own vehicle oil at home, how do you dispose of your used oil?

Household Waste Collection	Garbage	Ground	Other	No Response
4%	0%	0%	65%	31%

Q9. Do our community's storm drains and sewer system share the same underground pipe system?

Yes	No	Not sure	No Response
27%	31%	21%	21%

Q10. Do water and other substances that flow through storm drains go to a treatment plant to be processed to remove pollutants?

Yes	No	Not Sure	No Response
32%	25%	35%	8%

Q11. Do you know of any stormwater detention ponds near your home or business?

Yes	No	No Response
51%	34%	15%

Q12. What type of treatment do you believe that stormwater receives after it leaves a stormwater detention pond?

Treatment Plant	Direct Discharge	Natural Filtration	Not Sure	No Response
24%	8%	35%	21%	13%

3.3.3 Future Public Education and Outreach

There has been an increase in the number of participants since the 2008 and 2009/2010 stormwater surveys. The increase in the number of participants illustrates that more citizens are becoming more interested in issues that can potentially impact stormwater and surface waters. However, the citizens may benefit from follow-up education on proper disposal of waste that can be detrimental to the local waterways, such as proper application, storage and disposal of pesticides, proper disposal of pet waste, and proper disposal of used oil. Also, additional follow-up education may be needed that informs citizens about storm sewers being separate from sanitary sewers and that stormwater is not routed to the wastewater treatment plant.

The public involvement section of this document lists several options that the City has used previously, and some that the City continues to implement to involve the public in stormwater-related matters.

Most of these public involvement options include a public education component. Public involvement in stormwater-related activities is an effective tool for educating the public regarding stormwater issues. The City attempts to conduct these types of education activities whenever practicable.

3.4 Recordkeeping

The City began to track and maintain records of public education and outreach activities in 2011 and continues to track these activities on an annual basis. A spreadsheet was developed for tracking and maintaining these records. Records of public education and outreach activities are maintained at the City's public works building.

3.5 New Effectiveness Evaluation

(Permit Section S5.C.2.a.ii(b))

The Permit requires that, by July 1, 2020, permittees conduct a new evaluation of the effectiveness of an ongoing behavior change campaign that was required under 2013 Permit Section S5.C.1.a.ii and S5.C.1.c. Permittees are to document lessons learned and recommendations for which option to select from the following:

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.

The City has identified residential vehicle maintenance as the target audience for outreach for the effectiveness evaluation and is preparing outreach tools.

Permit Section S.5.C.2.a.ii.(c) requires that, based on which option is selected, permittees are required, by February 1, 2021, to 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. The strategy is to be implemented by April 1, 2021, based on Permit Section S5.C.2.a.ii(d). Permit Section S5.C.2.a.ii(e) requires that, by March 31, 2024, permittees are to 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.

Permittees are to use the results of the evaluation to continue to direct effective methods and implementation of the ongoing behavior change program.

Theme ideas for the effectiveness evaluation could include catch basin dumping, spill reporting, car washing, leaf and sediment management, irrigation, and fertilizer application.

From the 2013 Permit, the City performs its own public education and outreach. The City will implement the social marketing strategy by April 1, 2021, and begin reporting by March 31, 2024, in accordance with the Permit timeline.

4. PUBLIC INVOLVEMENT AND PARTICIPATION

The Permit requires that permittees provide ongoing opportunities for public involvement using methods such as advisory councils, watershed committees, participation in developing rate structures, and other similar activities. The following section details the City's current and future efforts to involve the public in stormwater-related issues.

4.1 Current Public Involvement Activities

The City currently involves the public through participation in the development of the SWMP and other stormwater related policies. This method is important in fostering a sense of ownership so that the community actively participates in improving and maintaining the quality of the City's stormwater. The Permit also requires that permittees create opportunities of public involvement with the development, implementation and update of the SMAP.

4.1.1 Stormwater Policy Development

(Permit Requirements S5.C.3.a & b)

City Web Page – The City posted the 2010 SWMP Plan and Annual Report on its website and collected input from City residents in the form of written and email feedback. This input was reviewed and responded to with regards to incorporation into the City's 2010 SWMP Plan. The Permit requires the City to post their SWMP Plan and annual report no later than May 31 of each year. The City may choose to submit the updated SWMP Plan to Ecology to be posted on Ecology's website.

Orting Stormwater Public Input Group – In February 2008, the City had a public meeting and formed the Orting Stormwater Public Input Group (Group). The Group was comprised of City Council Members and members of the general public who have an interest in surface water issues. The Group reviewed and provided comments on the development and implementation of the City's SWMP. The Group was consulted regarding the development and implementation of stormwater-related issues. After completion of the 2010 SWMP Plan, the Group was no longer needed.

City Council Meetings – Residents are invited to the second and last Wednesday Council meetings each month. Those that attend can voice public comments at the Council meetings. Public hearings are also advertised. When the SWMP Plan was on the agenda for adoption by City Council, an advertisement was sent to residents prior to the meeting. The advertisement encouraged community members to voice their opinions and comments.

5. MS4 MAPPING AND DOCUMENTATION

Section S5.C.3 of the 2013 Permit required on-going mapping of the MS4 under Illicit Discharge Detection and Elimination.

Section S5.C.4.b.i of the current Permit requires that, by January 1, 2020, permittees begin to collect information regarding size and material for all known MS4 outfalls as that information is obtained during the normal course of business, such as during field screening, inspection, or maintenance. The information is to be used to update records.

Permit Section S5.C.4.b.ii requires that, by August 1, 2023, permittees complete mapping of all known connections from the MSF4 to a privately-owned stormwater system.

Permit Section S5.C.4.c requires that, by August 1, 2021, permittees use an electronic format for mapping, such as Geographic Information System (GIS), Computer Aided Design (CAD) software, or other software that can map and store point, lines, polygons, and associated attributes.

The Stormwater Comprehensive Plan prepared for the City in May 2002, has a detailed stormwater system inventory for eight sub-basins delineated within the city, and a mapping system that accurately depicts the stormwater system inventory as it existed at that time.

The storm sewer system map has been updated to include detailed information regarding all stormwater infrastructure that has been added since 2002. Updates to the map include the location and labeling of all catch basins, stormwater treatment facilities, stormwater outfalls, and structural BMPs. Additionally, the City has updated the map to include information regarding the location of stormwater piping and what different type of pipe material is present. The City's mapping system also includes the location of its two receiving waters, as well as land use information. The City continues to update its stormwater map on a routine basis to ensure that it accurately depicts all known stormwater system infrastructure owned, operated, or maintained by the City. Recently, the City updated its stormwater map and implemented a GIS based mapping system. City mapping includes both public and private stormwater systems and continues to update the GIS mapping.

6. ILLICIT DISCHARGE DETECTION AND ELIMINATION

The Permit requires that the City has a program that addresses the prevention, detection, characterization, tracing, and elimination of illicit connections and discharges into its MS4. To that end, the City is required to meet several minimum performance measures related to Illicit Discharge Detection and Elimination (IDDE). The following section details the City's current and future efforts to comply with the IDDE portion of the Permit. The minimum performance measures for IDDE are summarized below:

- Current municipal storm sewer system maps.
- An ordinance or other regulatory mechanism that prohibits non-stormwater, illicit discharges to the City's storm sewer system.
- An ongoing IDDE program designed to detect and identify non-stormwater discharges and illicit connections to the City's storm sewer system.
- An ongoing program designed to address illicit discharges, including spills and illicit connections, to the City's storm sewer system.
- Training of City staff on IDDE-related subjects including identification, investigation, termination, cleanup, and reporting and responding of illicit discharges.
- Recordkeeping by the City to track and maintain records of the activities conducted to meet the IDDE requirements of this section.

6.1 IDDE Reporting and Correction

(Permit Requirement S5.C.5.a)

The Permit requires permittees to have a program with procedures to report and correct or remove IDDE sources when they are suspected or identified.

6.2 Public Education

(Permit Requirement S5.C.5.b)

The Permit requires that the City inform public employees, businesses, and the general public of the hazards associated with illicit discharges and improper disposal of waste to the City's MS4. This requirement includes distribution of appropriate information to target audiences, as well as the creation and maintenance of a public hotline for reporting spills and illicit discharges.

The City has an ongoing public education and outreach program. This program includes education regarding the hazards associated with illicit discharges and improper disposal of waste. The City issues its annual stormwater letter, which includes various stormwater educational topics such as illicit discharges and disposal of waste to the storm sewer system. Additionally, the City has created public education materials in a poster format regarding polluted stormwater runoff hazards, which is distributed to targeted audiences. The City will continue to create materials related to illicit discharges as a part of its public education and outreach program and distribute the materials as needed. The City annually attends several events in the community to promote BMPs. The City discusses the importance of maintaining the MS4s. Promotional items, such as coloring books that describe IDDEs to children, and flyers are handed out to the public. As described in the public outreach section of this plan, the City will document all public education and outreach activities.

6.3 IDDE Ordinance

(Permit Requirement S5.C.5.c)

As required by the 2007 - 2012 Permit, the City was required no later than August 16, 2009, to develop and implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illegal discharges, and/or dumping into the City's municipal separate storm sewer system to the maximum extent allowable under State and Federal law. The City has existing ordinances that prohibits illicit discharges to the City's storm sewer. Illicit connections and illicit discharges are defined in Orting Municipal Code (OMC) Title 9-5A-4, and OMC Titles 9-5A-9.H and -9.I prohibit illicit discharges. Inspection, enforcement, and penalties are currently regulated based on OMC Titles 9-5B-9, -10, -11, and -12.

6.4 IDDE Program Implementation

(Permit Requirements S5.C.5.d)

The Permit requires that the City develop and fully implement an ongoing program to detect, identify, and address non-stormwater discharges and illicit connections into the City's storm sewer system. The requirements for the program are multifaceted and have a range of deadlines. The following subsections detail the City's current and future efforts for complying with the IDDE program implementation portion of the Permit.

6.4.1 Field Screening Methodology

(Permit Requirement S5.C.5.d.i)

In accordance with the Permit, the City is required to implement a field screening methodology appropriate to the characteristics of the MS4. The City has developed a draft methodology for screening for illicit connections in accordance with the *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004.* This methodology is detailed in the City's IDDE Inspection Field Manual.

The City's methodology includes completing site inspections, report writing, conducting containment and cleanup measures, and sending the report to Ecology. Public Works staff are trained and re-trained annually. Blank inspection records with Ecology contact information is kept in each public works vehicle in the event there is an IDDE to report.

Historically, the City has had an inspection program that included identification of, and response to, complaints of illicit discharges. The City has now expanded and formalized this program to include location of priority areas where potential illicit discharges may occur. Priority areas for consideration include fueling stations, auto repair facilities, restaurants, and other commercial facilities that have potential for spills and related stormwater impacts. The City has identified the area of the City-zoned mixed-use town center and the three outfalls (Outfalls 4, 5, and 6) that convey stormwater from the town center as priority areas for illicit discharge investigation. Outfall 4 discharges to the Puyallup River and is located at the Kansas Street Extension. Outfalls 5 and 6 discharge to the Carbon River. Outfall 5 is located near River Avenue NE and Outfall 6 is located near the Orting High School.

As specified in the 2007 – 2012 Permit, the City was required to prioritize receiving waters for visual inspection by February 16, 2010; and perform visual inspections of three high priority waterbodies by February 16, 2011. The City has only two receiving water bodies, the Puyallup River and the Carbon

River. These receiving waters are currently, and will continue to be, inspected visually at least annually. Additionally, while the City has only two receiving water bodies, the City will perform annual visual inspections at the three outfall locations along the Carbon River and the four outfall locations along the Puyallup River, for a total of at least seven visual inspections annually.

Note that although six additional outfall locations are present within the city limits along the Puyallup River near the Soldiers Home location. These outfalls are owned, operated, and maintained by Pierce County and will continue to be the County's responsibility with regards to Permit requirements.

Field screening for at least 40 percent of the MS4 had to be completed by December 31, 2017; and 12 percent each year thereafter. As of March 31, 2018, 100 percent of the MS4 coverage area has been screened.

6.4.2 Public Hotline

(Permit Requirement S5.C.5.d.ii)

The City maintains a hotline for reporting illicit discharges and spills. The City's public telephone number is (253) 377-0262. The hotline is connected to a City voice mailbox, which records complaints 24 hours per day, 7 days per week. The hotline is responded to during normal business hours Monday through Friday, excluding holidays. Messages left on weekends or holidays are answered on the following business day. The City maintains records of all calls received and the associated follow-up actions performed. The City will include a summary of these records in its annual report.

6.4.3 Training Program

(Permit Requirement S5.C.5.d.iii)

The Permit requires the City to have a training program for all municipal field staff who might come in to contact with an illicit discharge or connection to the MS4 during normal job activities. Public Works staff are trained on an annual basis.

6.4.4 Illicit Discharge Characterization

(Permit Requirement S5.C.5.e.i)

The City has an ongoing program of characterizing illicit discharges. This includes characterizing the potential public or environmental threat posed by any illicit discharge found by the City. The City's procedure to address the evaluation of whether the illicit discharge should be immediately contained, and steps taken for containment, are included below.

The City has an ongoing program of responding to illicit discharges which includes both complaint-based and City staff-initiated investigations. To ensure full compliance with the Permit, the City will respond within 7 days, on average, to any complaints, reports, or monitoring information that indicates a potential illicit discharge, spill, or illegal dumping to its storm sewer system. Additionally, the City will respond immediately to problems or violations that are determined to be emergencies, or otherwise characterized as urgent or severe.

6.4.5 Tracing Illicit Discharges

(Permit Requirement S5.C.5.e.ii)

The City's current program of illicit discharge investigation includes determination of illicit discharge sources. The City's program is being expanded to include the ability of camera investigation of storm sewer lines and collecting and analyzing water samples when necessary. The City will ensure that staff is trained in the usage of any new investigation and monitoring equipment that is implemented. Additionally, protocols for the usage of any new techniques will be summarized and included in the City's IDDE Inspection Field Manual.

6.4.6 Illicit Discharge Source Removal

(Permit Requirement S5.C.5.e.iii)

The City currently has procedures for removing illicit discharge sources. These procedures include notifying the responsible party and/or property owner, notification of any other authorities including Ecology, technical assistance for discharge elimination, performing follow-up inspections, and a process of escalating enforcement and legal actions if the discharge is not eliminated.

As discussed in the IDDE ordinance section above, the draft revisions to the City's ordinances give the City the legal authority to escalate enforcement actions against responsible parties. In the future, the City will initiate investigations no later than 21 days after a report or discovery of suspected illicit connections to the storm sewer system. The City will use its enforcement authority to ensure that any illicit connections are terminated within 180 days of an illicit connection being confirmed.

6.5 IDDE Training for Municipal Field Staff

(Permit Requirement S5.C.5.f)

Previous Permits required that, by August 16, 2009, permittees ensure that all field personnel responsible for identification, investigation, termination, cleanup, and reporting of IDDE-related incidents are properly trained to perform those duties. In addition, by February 16, 2010, previous Permit required that permittees develop and implement an ongoing training program for all municipal field staff that might come in to contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system. Follow-up training must be provided to address any changes in procedures, techniques, or requirements.

The City has conducted training for its field staff regarding its IDDE program and how to properly identify and address illicit discharges. The City will continue this training program for its new field personnel and continue to address updates to procedures, techniques, and requirements. The City documents and maintains records of the training provided and staff trained.

6.6 Recordkeeping

(Permit Requirement S5.C.5.g)

The City tracks and maintains records of the activities included in this section.

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

The Permit has several requirements to address controlling runoff and reduce pollutants in stormwater runoff from new development, redevelopment, and construction site activities. These requirements are listed below. The following sections within this chapter detail the City's current and planned activities to comply fully with the Permit.

Requirements for controlling runoff from new development, redevelopment, and construction sites include:

- An ordinance that addresses the minimum requirements, technical thresholds, and definitions in Appendix 1 of the Permit; a site planning process and BMP selection, design, and infeasibility criteria that will protect water quality and reduce the discharge of pollutants to the maximum extent practicable (MEP) using all known, available and reasonable methods of treatment (AKART) and prevention and control; LID competing needs criteria, BMP limitations; and the legal authority to inspect and enforce maintenance standards for private stormwater facilities.
- A permitting process with plan review, inspection, and enforcement capability to meet the standards required by the Permit.
- Provisions to verify adequate long-term operation and maintenance of stormwater treatment and flow control BMPs and facilities.
- Make available all copies of the Notice of Intent (NOI) for both construction and industrial activities to representatives of proposed new development and redevelopment. The City will continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.
- Verify that all staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct those activities. Training shall be documented, and records of training maintained for staff trained.
- Incorporate and require LID principles and LID BMPs to meet LID code-related requirements.
- Identify a stormwater management strategy to result in hydrologic and water quality conditions that fully support "existing uses" and "designated uses" throughout the stream system, as defined in WAC 173-201A-020.

7.1 Stormwater Ordinances

(Permit Requirement S5.C.6.a)

The City has finalized revisions of its ordinances to incorporate requirements under the Permit with regards to controlling runoff. Title 9-5A-9 in the OMC addresses runoff from new development, redevelopment, and construction sites. Ordinance revisions have been completed for the following:

- Maintenance responsibility.
- Maintenance schedule.
- Enforcement.

- Adopting a manual equivalent to the Washington State Department of Ecology *2014 Stormwater Management Manual for Western Washington* (Ecology Manual).The 2014 Ecology Manual is currently in the process of being reviewed for adoption. The OMC is being updated to reflect LID implementation.
- Thresholds for stormwater management and stormwater site plan preparation and review.

7.2 Stormwater Permitting Process

(Permit Requirement S5.C.6.b)

The City's stormwater program contains a permitting process that includes plan review, inspection, and enforcement capability.

Plan review of stormwater site plans for proposed development activities is performed by the City's engineers. The City inspects all development and construction sites for compliance with BMPs, Stormwater Pollution Prevention Plans (SWPPPs), and stormwater rules.

Permitted development sites are inspected prior to, during, and after construction. All permitted development sites with a high potential for sediment transport are inspected prior to clearing and construction. All permitted development sites are inspected during construction to ensure proper installation and maintenance of required erosion and sediment controls. Additionally, permitted sites are inspected upon completion of construction to ensure that stormwater facilities and BMPs are in place. Any noncompliance discovered during inspections is addressed through enforcement activities as needed. Site inspection conditions are documented on a Site Inspection Checklist. Hard copies of inspection reports are maintained by the City. Notices of Intent (NOIs) are submitted by the applicant to Ecology, and copies of these NOIs are maintained by the City.

7.3 Verification of Long-Term Operation and Maintenance of Post-Construction Stormwater Facilities and BMPS

(Permit Requirement S5.C.6.c)

The City has adopted ordinances which include maintenance responsibility, maintenance schedules, and enforcement procedures related to post-construction stormwater facilities and BMPs. The City has adopted maintenance standards for stormwater facilities as specified in the Ecology Manual. Annual inspections are performed on all stormwater treatment and flow control facilities unless maintenance records are available that justify alternative inspection frequencies. Additionally, new flow control and water quality treatment facilities are conducted every 6 months during the period of heaviest house construction to determine maintenance needs and to enforce maintenance standards.

Per the requirements in the Permit, maintenance is performed after an inspection identifies an exceedance of the maintenance standard with the following timeframes: within 1 year for typical maintenance facilities, within 6 months for catch basins, and within 2 years for maintenance that requires capital construction of less than $25,000.

City staff performs inspections at new development, redevelopment, and construction sites. Site inspection conditions are documented on a Site Inspection Checklist. Hard copies of inspection reports are maintained by the City. A sample Ecology Construction Stormwater Site Inspection Form is attached as Appendix C.

7.4 Notices for Stormwater-Related Activities

(Permit Requirement S5.C.6.d)

The City maintains copies of the "Notice of Intent for Construction Activities" and "Notice of Intent for Industrial Activities." The City provides copies of NOIs to representatives of proposed new development and redevelopment activities.

7.5 Staff Training

(Permit Requirement S5.C.6.e)

The City maintains a Certified Erosion and Sediment Control Lead (CESCL) for conducting inspections of stormwater control facilities at new development, redevelopment, and construction sites. The City also employs trained contract construction observers during construction activities, who work under the oversight of City staff. All staff responsible for stormwater runoff control activities, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. The City documents and maintains records of the training provided and the staff trained.

8. POLLUTION PREVENTION AND OPERATION AND MAINTENANCE FOR MUNICIPAL OPERATIONS

The Permit requires the following to address pollution prevention and operation and maintenance for its municipal operations:

- Establish 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 stormwater manual for a Phase 1 permittee that has been approved by Ecology. Maintenance shall be performed within the timelines as described in S5.C.7.a.ii of the Permit.
- Annually inspect all municipally owned or operated permanent stormwater treatment and flow control facilities, other than catch basins, and facilities that were permitted by the City.
- Conduct spot checks of potentially damaged permanent treatment and flow control facilities after major storm events (greater than 24-hour, 10-year recurrence interval rainfall). If spot checks reveal widespread damage/maintenance needs, inspect all stormwater treatment and flow control facilities that may be affected.
- Inspect all catch basins and inlets owned or operated by the City every 2 years. Clean the catch basins, if needed, based on inspection to comply with the Ecology Manual maintenance standards.
- Inspect at least 95 percent of all sites where inspection is required (according to the above) either cyclically or storm event related as described above.
- Establish and implement practices to reduce stormwater impacts associated with runoff from all lands owned or maintained by the City and road maintenance activities conducted by the City. This includes streets, parking lots, roads, highways, buildings, parks, open space, road rights-of-way, maintenance yards, and stormwater treatment and flow control BMPs and facilities.
- Develop and implement an ongoing training program for employees of the City whose construction, operations, or maintenance job functions may impact stormwater quality. Follow-up training shall be provided as needed to address changes in procedures, techniques, or requirements.
- Develop and implement a SWPPP for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the City in areas that are not required to have coverage under another authorizing NPDES permit.
- Records of inspections and maintenance or repair activities conducted by the City shall be documented.

The City has a proactive maintenance program, which involves periodic, routine maintenance of all stormwater treatment and conveyance structures including storm drains, catch basins, stormwater ponds, stormwater pipe, and outfalls. The following information details the City's current pollution prevention and operations and maintenance activities, as well as future actions that the City may implement to ensure continuance of effective stormwater treatment.

8.1 Maintenance Standards

(Permit Requirement S5.C.7.a.ii)

The City has adopted maintenance standards for stormwater treatment facilities through adoption and implementation of Volume V, Chapter 4 of the 2012 (amended 2014) Ecology Manual. These standards are followed for all routine operation and maintenance activities performed at City stormwater treatment facilities. Maintenance is performed per Permit requirements within 1 year for typical maintenance facilities, within 6 months for catch basins, and within 2 years for maintenance that requires less than $25,000 in capital construction. The maintenance standards will be reviewed and updated as required as the City reviews the 2014 Ecology Manual or equivalent for adoption.

The Permit requires that, by June 30, 2022, permittees update their maintenance standards to meet the maintenance requirements of the Permit. Maintenance standards have been adopted by the City through adoption of the following standards in OMC 9-5A-9.A through D:

- The 2019 City of Orting Stormwater Management Manual Amendment;
- The 2012 *Stormwater Management Manual for Western Washington* as amended in 2014;
- The currently-adopted City of Orting Development Standards;
- The 2012 *Low Impact Development Technical Guidance Manual for Puget Sound*;
- The 2013 *Rain Garden Handbook for Western Washington*.

8.2 Annual Inspections

(Permit Requirement S5.C.7.b.i.(b))

All 23 City owned or operated stormwater treatment facilities, excluding catch basins, are inspected at least annually. All stormwater retention/detention ponds are inspected and maintained at least twice during the summer. Stormwater outfalls are inspected annually in the fall before the start of the wet season, and during and after major storm events. Photographs of the outfalls are taken on a regular basis. Site investigations at all stormwater facilities are documented on inspection forms and maintained at the public works building. The City has implemented an electronic database of inspection and maintenance or repair activities at City owned or maintained stormwater facilities. The use of a database aids in tracking past operation and maintenance activities, as well as helping to dictate future facility inspection schedules.

The Permit also requires provisions to verify maintenance and inspection of stormwater facilities that are permitted and constructed and that discharge into the City's MS4. The provisions are to include:

Implementation of an ordinance or other enforceable mechanism that:

- Clearly identifies the party responsible for maintenance in accordance with the required maintenance standards.
- Requires inspection of facilities in accordance with the Permit requirements in S5.C.7.b.i.(b).
- Establishes enforcement procedures.

The Permit requires annual inspection of the stormwater facilities for facilities that were permitted with requirements of the NPDES Phase II Permit beginning in 2007. The Permit includes provisions that can allow for a different inspection frequency. The inspection program is to achieve at least 80 percent of

the required inspections. The program is also to include a procedure for keeping records of inspections and enforcement actions. The City does have a program to inspect privately-owned facilities that are privately maintained and to send out notification of items to be addressed.

The City requires that property owners and those in control of property maintain private systems per OMC 9-5B-8.D. The City can perform inspection and enforcement through OMC 9-5B-10. However, the OMC does not appear to require that records be submitted to the City for inspection and maintenance by private property owners or those in control of property.

8.3 Spot Checks

(Permit Requirement S5.C.7.c)

The City performs spot checks on treatment and flow facilities after major storm events. Any problems noted with facilities after these events are addressed as quickly as possible. If the spot checks indicate widespread damage or maintenance needs, all the potentially affected facilities are inspected.

8.4 Catch Basin Inspections

(Permit Requirement S5.C.7.c.iii)

The City inspected all 1,547 catch basins as required by the prior Permit and will continue to monitor every 2 years. The City has updated its stormwater facilities map, which includes all catch basin locations. The updated map categorizes stormwater facilities by basin and the City is now performing inspections by drainage basin.

8.5 Inspection Requirement Compliance

(Permit Requirement S5.C.7.c.iv)

The City currently inspects at least 95 percent of its stormwater facilities annually. As mentioned in the previous subsection, the City now performs inspections by drainage basin, which improves inspection efficiency and further ensures that the 95-percent inspection goal is met annually.

8.6 Stormwater Impact Reduction Practices

(Permit Requirement S5.C.7.f)

The City has methods in place to reduce stormwater impacts associated with runoff from lands owned or maintained by the City including streets, parking lots, roads, and highways. These practices include periodic street cleaning, pipe cleaning, ditch maintenance, dust control, and cleaning of culverts that convey stormwater in ditch systems. Records of these types of activities are tracked and maintained at the public works building. In order to ensure full compliance with the Permit, the City will continue to assess the need for further stormwater impact reduction practices including, but not limited to, road repair and resurfacing, snow and ice control, utility installation, pavement striping maintenance, and roadside area maintenance.

The Permit requires that, by December 31, 2022, permittees document the practices, polices, and procedures. As noted above, the City has been compiling documentation related to stormwater impact reduction practices and will continue to do so as required by the Permit.

8.7 Ongoing Training Program Development and Implementation

(Permit Requirement S5.C.7.e)

City staff currently receives training regarding stormwater control via on-the-job training. The City has developed a formalized training program to educate workers who perform job functions that may impact stormwater quality and has conducted training for its staff. Additionally, the City will perform training as needed to address changes in procedures, techniques, or requirements. The City documents and maintains records of staff training.

8.8 Stormwater Pollution Prevention Plans (SWPPPS)

(Permit Requirement S5.C.7.f)

The City has developed and implemented SWPPPs for the City's maintenance yard, WWTP, City Shop, and City Hall. The SWPPPs will be followed by the City to ensure that activities conducted in these areas do not adversely impact stormwater quality.

8.9 Inspections and Maintenance/Repair Recordkeeping

(Permit Requirement S5.C.7.g)

The City maintains logs for all inspection and maintenance actions performed at City owned and operated stormwater facilities. The City maintains an electronic database of these activities. The use of the database aids in tracking past operation and maintenance activities, as well as helps dictate future facility inspection schedules.

9. SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT

9.1 Source Control Program Requirements

(Permit Section S5.C.8.a)

The Permit requires permittees to implement a program to prevent and reduce pollutants in runoff from areas that discharge into the MS4. Requirements of the source control program are summarized below:

- Operational source control BMPs, structural source control BMPs, and/or treatment BMPs as required to pollution generating sources associated with existing land uses and activities;
- Inspection of pollution generating sources for both publicly- and privately-owned institutional, commercial, and industrial sites to enforce implementation of the required BMPs;
- Application and enforcement of local ordinance at sites, identified as discussed below, including sites covered under a separate NPDES permit;
- Practices to reduce polluted runoff from the application of pesticides, herbicides, and fertilizers from the sites identified in the inventory.

9.2 Source Control Ordinance

(Permit Section S5.C.8.b.i)

By August 1, 2022, the City is required to adopt and make effective an ordinance or other enforceable document required source control BMPs for pollution-generating sources associated with existing land uses and activities. Businesses and activities within the City that may require source control BMPs are summarized in Table 9-1 below. See Appendix D for a full list from Permit Appendix 8 of existing land uses and activities that may require source control BMPs.

Table 9-1. Applicable Sites Potentially Requiring Source Control BMPs

Activity	SIC[1] Major Group	SIC Industry Group Number	NAICS[2] Major Group
Construction of Buildings	15		236
Specialty Trade Contractors	17		238
Beverage, Food, and Tobacco Manufacturing	20		311, 312
Utilities	49		2211xx
Building Materials, Hardware, Garden Supplies Dealers		521, 523, 526	444
Food and Beverage Stores	54		445
Automotive Dealers and Gasoline Service Stations	55		441, 447
Food Services and Drinking Places	58		722

Activity	SIC[1] Major Group	SIC Industry Group Number	NAICS[2] Major Group
Repair and Maintenance	75		811192, 8111xx, 8112xx, 8113xx, 8114xx
Ambulatory Health Care Services and Hospitals		806, 807	621910
Educational Services	82		6111xx, 6112xx, 6113xx, 6115xx
Museums, Historical Sites, and Similar Institutions		842	712

1 SIC: Standard Industrial Classification

2 NAICS: North American Industry Classification System

Source control BMPs can be found in Ecology's Stormwater Management Manual for Western Washington Volume IV or in stormwater manuals developed by permittees that are covered under the NPDES Phase I Permit.

The City has not prepared the required source control ordinance yet but will do so by August 1, 2022.

9.3 Source Control Program Inventory

(Permit Section S5.C.8.b.ii)

The Permit requires that, by August 1, 2022, the City is to develop an inventory that identifies publicly and privately owned institutional, commercial, and industrial sites that could potentially discharge pollutants into the City's MS4. The inventory is to include:

- Businesses and/or sites identified based on the presence of activities that are pollution generating as identified above;
- Other pollution generating sources, based on complaint response, such as home-based businesses and multi-family sites.

The City has prepared a source control inventory and will be developing a written source control inspection program by January 1, 2023. The City will update its codes for source control enforcement by January 1, 2023.

9.4 Source Control Inspection Program

(Permit Section S5.C.8.b.iii)

The Permit requires that, by January 1, 2023, the City is to implement an inspection program for the sited identified above. The City is to provide information about activities that may generate pollutants and the source control requirements applicable to those activities. See Permit Section S5.C in Appendix A for additional inspection requirements.

The City has not implemented a source control inspection program yet but will do so by January 1, 2023.

9.5 Source Control Enforcement

(Permit Section S5.C.8.b.iv)

The Permit requires that, by January 1, 2023, the City is required to implement a progressive enforcement policy that includes the following:

- If the City determines that a site has failed to adequately implement required BMPs, the City is to take appropriate follow-up action(s), which may include phone calls, reminder letters, emails, or follow-up inspections.
- If the City determines that a site has failed to adequately implement BMPs after a follow-up inspection(s), the City is to take enforcement action as established through authority in its municipal codes or ordinances, or through the judicial system.
- The City is to 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. The City is also to maintain records of sites that are not inspected because the property owner denies entry.
- The City can also refer non-emergency violations of local ordinances to Ecology if the City has made a documented effort of progressive enforcement. The minimum progressive enforcement effort is to include documentation of inspections and warning letters or notices of violation.

The City has not yet implemented a progressive source control enforcement policy yet but will do so by January 1, 2023.

9.6 Source Control Training

(Permit Section S5.C.8.b.v)

The City is also required to implement an on-going training program for staff who are responsible for implementing the source control program. The training is to 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 is to be provided as needed to address changes, such as changes in procedures, techniques, requirements, or staff. The City is to document and maintain records of the training.

The City has not yet implemented the on-going source control program training but is planning to do.

10. PERMIT SECTION S4 – COMPLIANCE WITH STANDARDS

Permit Section S4.F identifies actions required by permittees if there is a discharge into waters of the state that would violate surface water quality standards, groundwater quality standards, sediment management standards, or human health-based criteria. If there is a prohibited discharge, permittees are to notify Ecology. After Ecology reviews the notification, Ecology may determine that an Adaptive Management Response is required. If an Adaptive Management Response is required, the permittee is required to review its SWMP and submit a report to Ecology in accordance with Permit Section S4.F.3. The report is to include the following:

- A description of the operational and/or structural BMPs that are currently being implemented to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards, including a qualitative assessment of the effectiveness of each Best Management Practice (BMP).
- A description of potential additional operational and/or structural BMPs that will or may be implemented in order to apply AKART on a site-specific basis to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards.
- A description of the potential monitoring or other assessment and evaluation efforts that will or may be implemented to monitor, assess, or evaluate the effectiveness of the additional BMPs.
- A schedule for implementing the additional BMPs including, as appropriate: funding, training, purchasing, construction, monitoring, and other assessment and evaluation components of implementation.

After the report is reviewed and finalized, each annual report is to summarize the status of implementing the Adaptive Management Response and the results of any monitoring, assessments or evaluations that were required to be performed.

There have been no discharges from the City's MS4 that have resulted in a violation requiring Ecology notification and an Adaptive Management Response.

11. PERMIT SECTION S7 – COMPLIANCE WITH TMDL REQUIREMENTS

Permit Appendix 2 identifies the waterbodies with TMDLs applicable to NPDES Phase II permittees. Although Permit Appendix 2 lists 20 TMDLs, including one for the Puyallup River, there are no TMDL requirements applicable to the City. The TMDL for the Puyallup River is for fecal coliform. The applicable MS4 permittees identified in the Permit are King and Pierce counties and the cities of Auburn, Edgewood, Enumclaw, Puyallup, and Sumner. The waterbodies identified for TMDL actions are downstream of Orting.

12. PERMIT SECTION S8 – MONITORING AND ASSESSMENT

12.1 Regional Status and Trends Monitoring

Regional Status and Trends Monitoring was a requirement in the prior Permit. Permittees had the option to either pay into a fund to support a regional monitoring program or to develop a monitoring plans specifically for the permittee's Permit coverage area. The City chose to participate in the regional program and has notified Ecology. The City has submitted payments to Ecology. Required payments into the regional fund are summarized in Table 12-1 below.

Table 12-1. Required Payments Into the Regional Fund

Permit	Permit Section	Purpose	Amount	Due
2013	S8.B.1	Status and Trends Monitoring	$1,525	August 15, 2014, and annually thereafter
Current	S8.A.1	Status and Trends Monitoring – one-time payment for small streams and marine nearshore areas monitoring	Unclear	December 1, 2019
Current Permit	S8.A.2; Appendix 11	Status and Trends Monitoring	$1,296	August 15, 2014, and annually thereafter
2013	S8.D	Source identification and diagnostic monitoring (RSMP SIDIR)	$236	August 15, 2014, and annually thereafter

12.2 SWMP Effectiveness and Source Identification Studies

SWMP effectiveness and source identification studies in the prior permit also allowed for permittees to either pay into a fund to support regional studies or to develop a study specifically for the permittee's Permit coverage area. The City chose to participate in the regional study and has notified Ecology. The City has been submitting payments to Ecology. Required payments into the SWMP effectiveness study are summarized in Table 12-2 below.

Table 12-2. Required Payments into the SWMP Effectiveness Study

Permit	Permit Section	Purpose	Amount	Due
2013	S8.C.1	Effectiveness Study	$2,541	August 15, 2014, and annually thereafter
Current permit	S8.B.1	Effectiveness study – one-time payment	Unclear	12/1/19
Current permit	S8.B.2; Appendix 11	Effectiveness study – annual payment	$2,368	8/15/2020, and annually thereafter

Based on Permit Section S8.3, records of SWMP activities and associated tracked data is to be submitted to Ecology upon request.

Appendix A

Permit Section S5

S5. STORMWATER MANAGEMENT PROGRAM FOR CITIES, TOWNS, AND COUNTIES

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.[1]

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

[1] New Permittees shall fully develop and implement the SWMP in accordance with the schedules contained in this Section no later than February 2, 2024.

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.[2] 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, 2021.

[2] New Permittees shall begin implementing the requirements of S5.A.3.a, no later than August 1, 2021.

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.

1. Stormwater planning

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.

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, 2021, 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.

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.

(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.

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).

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.

d. Stormwater Management Action Planning[3] (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

[3] New Permittees are exempt from S5.C.1.d. for this permit term.

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.

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.

2. Public Education and Outreach

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. [4]

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:

[4] New Permittees shall begin implementing the requirements of S5.C.2 no later than August 1, 2021.

- 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.

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: [5]

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.

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.

3. Public Involvement and Participation

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.[7]

[5] No later than August 1, 2021, new Permittees shall follow social marketing practices and methods, similar to Community-Based Social Marketing, to develop a behavior change program that is tailored to the community.

[6] No later than October 1, 2021, New Permittees shall begin to implement the strategy developed in S5.C.2.a.ii.(c).

[7] New Permittees shall develop and begin to implement requirements according to S5.C.3.a no later than August 1, 2020. New Permittees are exempt from SMAP this permit term.

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.

4. MS4 Mapping and Documentation

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.

vi. Connections between the MS4 owned or operated by the Permittee and other municipalities or public entities.

vii. All connections to the MS4 authorized or allowed by the Permittee after February 16, 2007. [9,10]

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.

[8] New Permittees shall meet the requirements to map the MS4 according to S5.C.4. no later than February 2, 2024, except where otherwise noted in this Section.

[9] New Permittees shall meet the requirements of S5.C.4.a.vii after August 1, 2019, for all connections to the MS4 authorized after August 1, 2019.

[10] Permittees do not need to map the following residential connections: individual driveways, sump pumps, or roof downspouts.

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.

5. Illicit Discharge Detection and Elimination

The SWMP shall include an ongoing program designed to prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the MS4.[11]

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.

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

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.

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

[11] New Permittees shall meet the requirements of S5.C.5 no later than August 1, 2021 except where otherwise noted in this Section.

(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 a minimum, public education activities and water conservation efforts.

(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. 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.

d. Each Permittee shall implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4.[12] 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.

(a) All Permittees shall complete field screening for an average of 12% of the MS4 each year.[13] Permittees shall annually track total percentage of the MS4 screened beginning August 1, 2019.

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

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.[14]

e. Each Permittee shall implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the Permittee's MS4.[15] 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.

[12] New Permittees shall fully implement the requirements of S5.C.5.d no later than August 1, 2023.

[13] New Permittees shall complete S5.C.5.d.i requirements for field screening covering at least 12% of the MS4 within the Permittee's coverage area no later than December 31, 2023, and on average 12% each year thereafter.

[14] New Permittees shall develop and begin implementing the ongoing training program described in S5.C.5.d.iii no later than February 2, 2021.

[15] New Permittees shall fully develop and implement the requirements of S5.C.5.e no later than August 1, 2023.

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.

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.[16]

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.

[16] New Permittees shall meet the requirements of S5.C.5.f no later than February 2, 2021.

6. Controlling Runoff from New Development, Redevelopment, and Construction Sites

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.[17]

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[18] submitted:

i. On or after July 1, 2022.

ii. Prior to January 1, 2017, that have not started construction[19] by January 1, 2022.[20]

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

[17] For continuing Permittees, this means continuing to implement existing programs developed under previous permits until updates are made to meet the schedules defined. *New Permittees shall meet the requirements of S5.C.6 no later than December 31, 2022, except where otherwise specified in this Section.*

[18] In this context, "application" means, at a minimum a complete project description, site plan, and, if applicable, SEPA checklist. Permittees may establish additional elements of a completed application.

[19] In this context "started construction" means the site work associated with, and directly related to the approved project has begun. For example: grading the project site to final grade or utility installation. Simply clearing the project site does not constitute the start of construction. Permittees may establish additional requirements related to the start of construction.

[20] For Permittees in **Lewis and Cowlitz counties**: Prior to July 1, 2017, that have not started construction by June 30, 2022. **For Lynden, Snoqualmie**: Prior to January 1, 2018, that have not started construction by January 1, 2023. **For Aberdeen**: Prior to July 1, 2018, that have not started construction by June 30, 2023. **Shelton and Clallam County** shall adopt and make effective a local program that meets the requirements of S5.C.6.b(i) through (iii) no later than December 31, 2022. The local program shall apply to all applications submitted on or after January 1, 2023, and shall apply to applications submitted prior to January 1, 2023, which have not started construction by January 1, 2028.

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.

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 non-compliance.

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.[21]

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.[22]

7. Operations and Maintenance

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.[23]

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

[21] New Permittees shall meet the requirements of S5.C.6.d beginning no later than August 1, 2019.

[22] New Permittees shall meet the requirements of S5.C.6.e no later than December 31, 2022.

[23] New Permittees shall develop and implement the requirements of S5.C.7 no later than December 31, 2022 except where otherwise noted in this Section.

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.

iii. Each Permittee shall inspect all catch basins and inlets owned or operated by the Permittee every two years.[24] 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

[24] New Permittees shall inspect and, if needed, clean all catch basins and inlets owned or operated by the Permittee in accordance with the requirements of S5.C.7.c once during the permit term, to be completed no later than February 2, 2024.

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

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.

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.

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

8. Source Control Program for Existing Development

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.

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.

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.

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.

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.

Appendix B

Permit Requirements Implementation Table

2019-2024 NPDES PERMIT COMPLIANCE DUE DATES

Permit Section	Description	2020	2021	2022	2023	2024
S5.A.5.b	Coordinate among departments within the jurisdiction to eliminate barriers to permit compliance		3/31/2021			
S5.C1.a, Appendix 3 #5	Stormwater planning coordination	8/1/2020				
S5.C.1.b.i(a); Appendix 3, #6	List the relevant land use planning efforts that have taken place in your jurisdiction (land use plans that are used to accommodate growth, stormwater management, or transportation)		3/31/2021			
S5.C.1.b.i(a); Appendix 3, #6	List the relevant land use planning efforts that have taken place in your jurisdiction (land use plans that are used to accommodate growth, stormwater management, or transportation)				1/1/2023	
S5.C.1.b.i(a) and (b); Appendix 3, #7	List of stormwater capital projects (currently in or slated for future design and construction) that resulted from this planning		3/31/2021			
S5.C.1.b.i(a) and (b); Appendix 3, #7	List of stormwater capital projects (currently in or slated for future design and construction) that resulted from this planning				1/1/2023	
S5.C.1.b.i(a) and (b); Appendix 3, #8	Describe of watershed protection measures associated with stormwater management and land use planning actions that resulted from this planning		3/31/2021			
S5.C.1.b.i(a) and (b); Appendix 3, #8	Describe of watershed protection measures associated with stormwater management and land use planning actions that resulted from this planning				1/1/2023	

2019-2024 NPDES PERMIT COMPLIANCE DUE DATES

Permit Section	Description	2020	2021	2022	2023	2024
S5.C.1.b.i(a) and (b); Appendix 3, #9	Were land acquisitions identified (or are planning ahead for) that are useful for stormwater facilities to: accommodate growth or to better serve an existing developed area? If yes, for what purpose?		3/31/2021			
S5.C.1.b.i(a) and (b); Appendix 3, #9	Were land acquisitions identified (or are planning ahead for) that are useful for stormwater facilities to: accommodate growth or to better serve an existing developed area? If yes, for what purpose?				1/1/2023	
S5.C.1.b.i(a) and (b); Appendix 3, #10	Permits to control or treat municipal stormwater discharges that pollute waters of the State (e.g. Limits to impervious cover added to any zoning districts, regional facility planning, minimization of vegetation loss, etc.)? If yes, briefly describe and list relevant plan or code sections, if applicable.		3/31/2021			
S5.C.1.b.i(a) and (b); Appendix 3, #10	Permits to control or treat municipal stormwater discharges that pollute waters of the State (e.g. Limits to impervious cover added to any zoning districts, regional facility planning, minimization of vegetation loss, etc.)? If yes, briefly describe and list relevant plan or code sections, if applicable.				1/1/2023	
S5.C.1.b.i(a) and (b); Appendix 3, #11	Updates to goals and policies related to investment in stormwater management facilities/BMPs? If yes, briefly describe.		3/31/2021			
S5.C.1.b.i(a) and (b); Appendix 3, #11	Updates to goals and policies related to investment in stormwater management facilities/BMPs? If yes, briefly describe.				1/1/2023	

2019-2024 NPDES PERMIT COMPLIANCE DUE DATES

Permit Section	Description	2020	2021	2022	2023	2024
S5.C.1.b.i(a) and (b); Appendix 3, #12	Does the long-range plan identify the location and existing capacity of the stormwater facilities owned or operated by the Permittee and show which of those stormwater facilities have unused capacity? Do these stormwater facility locations impact where housing, or other types of development, are projected to be located or influence the acquisition of land? (If yes, how?) Does the long-range plan identify a lack of facilities and the potential impacts of existing or new development to those areas and receiving waters? Any new proposed locations and capacities of stormwater facilities needed for the timeframe of the plan?		3/31/2021			
S5.C.1.b.i(a) and (b); Appendix 3, #12	Does the long-range plan identify the location and existing capacity of the stormwater facilities owned or operated by the Permittee and show which of those stormwater facilities have unused capacity? Do these stormwater facility locations impact where housing, or other types of development, are projected to be located or influence the acquisition of land? (If yes, how?) Does the long-range plan identify a lack of facilities and the potential impacts of existing or new development to those areas and receiving waters? Any new proposed locations and capacities of stormwater facilities needed for the timeframe of the plan?				1/1/2023	

2019-2024 NPDES PERMIT COMPLIANCE DUE DATES

Permit Section	Description	2020	2021	2022	2023	2024
S5.C.1.b.i(a) and (b); Appendix 3, #13	Based on the projected population densities and distribution of growth over the planning period, describe how stormwater runoff impacts are forecasted. Does stormwater management information (including water quality) direct where growth is directed?		3/31/2021			
S5.C.1.b.i(a) and (b); Appendix 3, #13	Based on the projected population densities and distribution of growth over the planning period, describe how stormwater runoff impacts are forecasted. Does stormwater management information (including water quality) direct where growth is directed?				1/1/2023	
S5.C.1.b.i(b); Appendix 3, #14	Did you submit a report as described in S5.C.1.b.i(b)?				1/1/2023	
S5.C.1.d.i; Appendix 3, #17	Developed a watershed inventory as outlined in S5.C.1.d.i and attach			3/31/2022		
S5.C.1.d.ii(a)-(c); Appendix 3, #18	Developed a receiving water prioritization method and process as described in S.5.C.1.d.ii(a)-(c)? Attach			6/30/2022		
S5.C.1.d.iii; Appendix 3, #19	Developed a Stormwater Management Action Plan (SMAP) for at least one high priority area? Attach				3/31/2023	
S5.C.2	Did you choose to adopt one or more elements of a regional program					
S5.C2.a.ii (b); Appendix 3 #22	Conducted an evaluation of the effectiveness of the ongoing behavior change program and documented recommendations as outlined in S.5.C.2.a.ii(b)	7/1/2020				
S5.C2.a.ii (c); Appendix 3 #23	Developed a behavior change campaign that is tailored to the community in accordance with S5.C.2.a.ii.(c)? Attach		2/1/2021			

2019-2024 NPDES PERMIT COMPLIANCE DUE DATES

Permit Section	Description	2020	2021	2022	2023	2024
S5.C2.a.ii (c); Appendix 3 #24	Began implementing strategy outlined in S.5.C.2.a.ii(c)		4/1/2021			
S5.C2.a.ii (e); Appendix 3 #25	Attach the report developed in accordance with S5.C.2.a.ii.(e), which evaluated the changes in understanding and adoption of targeted behaviors resulting from the implementation of the strategy and any planned or recommended changes to the program in order to be more effective.					3/31/2024
S5.C.3.	Posted updated SWMP	5/31/2020				
S5.C.5.	Mapping of outfall size/material				8/1/2023	
S5.C.4.b.i; Appendix 3 #30	Started mapping outfall size and material in accordance with S5.C.4.b.i? Attach spreadsheet.	1/1/2020				
S5.C.4.b.ii; Appendix 3 #31	Completed mapping connections to private storm sewers in accordance with S5.C.4.b.ii?				8/1/2023	
S5.C.4.c.; Appendix 3 #32	Developed electronic format of map		8/1/2021			
S5.C.6.a	Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects. (Implement the requirements of S5.C.6B(i) through (iii) based on dates listed.)			6/30/2022		
S5.C.6.b.i-iii; Appendix 3 #44	Revised ordinance or other enforceable mechanism to effectively address runoff from new development, redevelopment, and construction sites per the requirement of S5.C.6.b.i-iii			6/30/2022		
S5.C.7.a; Appendix 3 #57	Updated maintenance standards specified in Stormwater Management manual for Western Washington per S5.C.7.a			6/30/2022		

2019-2024 NPDES PERMIT COMPLIANCE DUE DATES

Permit Section	Description	2020	2021	2022	2023	2024
S5.C.7.d; Appendix 3 #69	Documented practices, polices, 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 Permitee			12/31/2022		
S5.C.7.f; Appendix 3 #72	Updated, if needed, SWPPPs according to S5.C.7.f			12/31/2022		
S5.C.8.b.i.; Appendix 3 #73	Adopt ordinance requiring application of source control BMPs for pollutant generating sources			8/1/2022		
S5.C.8; Appendix 3 #74	Established an inventory per S5.C.8.b.ii			8/1/2022		
S5.C.8.b.iii; Appendix 3 #75	Implemented an inspection program per S5.C.8.b.iii				1/1/2023	
S5.C.8.b.iv; Appendix 3 #76	implemented a progressive enforcement policy per S5.C.8.b.iv				1/1/2023	
S5.C.8.b.iii	Attach list of inspections, organized by business category, noting the amount of times each business was inspected and if enforcement actions were taken				1/1/2023	
S5.C.8.b.v.	Implemented an ongoing source control training program				1/1/2023	
S9.A	Begin annual reporting	3/31/2020				
S9.A, Appendix 12	IDDE Reporting Data and Format - the form or equivalent electronic file is required to be used by 3/31/21		3/31/2021			
S9.A, Appendix 12	IDDE Reporting Data and Format - the form or zipped file is required to be used by 3/31/22			3/31/2022		

Appendix C

Construction Site Inspection Form

Construction Stormwater Site Inspection Form

Project Name _____ Permit # _____ Inspection Date _____ Time _____

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*
Print Name: _____

Approximate rainfall amount since the last inspection (in inches): _____

Approximate rainfall amount in the last 24 hours (in inches): _____

Current Weather Clear ☐ Cloudy ☐ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☐ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (*check all that apply*):

Pre Construction/installation of erosion/sediment controls	☐	Clearing/Demo/Grading	☐	Infrastructure/storm/roads	☐
Concrete pours	☐	Vertical Construction/buildings	☐	Utilities	☐
Offsite improvements	☐	Site temporary stabilized	☐	Final stabilization	☐

C. Questions:

1. Were all areas of construction and discharge points inspected? Yes ___ No ___
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen Yes ___ No ___
3. Was a water quality sample taken during inspection? (*refer to permit conditions S4 & S5*) Yes ___ No ___
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* Yes ___ No ___
5. If yes to #4 was it reported to Ecology? Yes ___ No ___
6. Is pH sampling required? pH range required is 6.5 to 8.5. Yes ___ No ___

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

_____

_____

_____

_____

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				
pH	Paper, kit, meter				

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)						
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?						
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.						
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?						
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?						
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).						
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.						
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.						
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?						

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?						
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?						
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?						
	Is off-site storm water managed separately from stormwater generated on the site?						
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?						
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?						
7 Drain Inlets	Storm drain inlets made operable during construction are protected.						
	Are existing storm drains within the influence of the project protected?						
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?						
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?						
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?						
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?						
	Has secondary containment been provided capable of containing 110% of the volume?						
	Were contaminated surfaces cleaned immediately after a spill incident?						
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?						

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.						
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.						
	Dewatering has been done to an approved source and in compliance with the SWPPP.						
	Were there any clean non turbid dewatering discharges?						
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?						
12 Manage the Project	Has the project been phased to the maximum degree practicable?						
	Has regular inspection, monitoring and maintenance been performed as required by the permit?						
	Has the SWPPP been updated, implemented and records maintained?						
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?						
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?						
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.						
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?						
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.						

E. Check all areas that have been inspected. ✔

All in place BMPs ☐ All disturbed soils ☐ All concrete wash out area ☐ All material storage areas ☐
All discharge locations ☐ All equipment storage areas ☐ All construction entrances/exits ☐

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

Inspected by: (print) _____ (Signature) _____ Date: _____

Title/Qualification of Inspector: _____

Appendix D

Permit Appendix 8

APPENDIX 8 – Businesses and Activities that are Potential Sources of Pollutants

Use this appendix to help identify businesses and/or activities with potential outdoor pollutant-generating sources that discharge to the MS4 and should be included in the Permittee's source control inventory, developed pursuant to S5.C.8.b.ii. The Standard Industrial Code (SIC), Major Group, and NAICS numbers are provided for reference. Permittees may include additional outdoor pollutant-generating sources that are located within their jurisdictions.

Group Description	SIC Major Group	SIC Industry Group No.	NAICS Major Group
Support Activities for Animal Production		074, 075	1152xx,
Construction of Buildings	15		236
Heavy and Civil Engineering Construction	16		237
Specialty Trade Contractors	17		238
Beverage, Food, and Tobacco Manufacturing	20		311, 312
Wood Product Manufacturing	24		321
Paper Manufacturing	26		3221xx, 3222xx
Printing and Related Support Activities	27		323
Chemical Manufacturing	28		325
Petroleum and Coal Products Manufacturing	29		3241xx
Plastics and Rubber Product Manufacturing	30		326
Leather and Allied Product Manufacturing	31		316
Nonmetallic Mineral Product Manufacturing	32		327
Primary Metal Manufacturing	33		331
Fabricated Metal Product Manufacturing	34		332
Machinery, Computer, and Electronic Product manufacturing	35		333, 334
Electrical Equipment, Appliance, and Component Manufacturing	36		335
Transportation Equipment Manufacturing	37		336
Rail Transportation	40		482

Group Description	SIC Major Group	SIC Industry Group No.	NAICS Major Group
Transit and Ground Passenger Transportation	41		485
Truck Transportation and Warehousing	42		484, 493
Support Activities for Transportation		473, 474, 478	4881xx, 4882xx, 4884xx, 4889xx,
Utilities	49		2211xx
Wholesale Trade – Durable Goods		501, 503, 505, 506, 507, 509	423140, 423930, 423110, 4233xx, 4237xx, 4238xx,
Wholesale Trade – Nondurable Goods		514, 515, 516, 517, 518, 519	424930, 4244xx, 4246xx, 4247xx, 4248xx,
Building Materials, Hardware, Garden Supplies Dealers		521, 523, 526	444
Food and Beverage Stores	54		445
Automotive Dealers and Gasoline Service Stations	55		441, 447
Food Services and Drinking Places	58		722
Rental and Leasing Services		735	5321xx, 5324xx
Repair and Maintenance	75		811192, 8111xx, 8112xx, 8113xx, 8114xx,
Ambulatory Health Care Services and Hospitals		806, 807	621910,
Educational Services	82		6111xx, 6112xx, 6113xx, 6115xx
Museums, Historical Sites, and Similar Institutions		842	712