



**2021**  
**City of Bremerton**  
**Stormwater Management Program**  
**(SWMP)**  
**Western Washington NPDES Phase II**  
**Municipal Stormwater Permit**  
**# WAR04-5507**

**Issuance Date:** July 1, 2019  
**Effective Date:** August 1, 2019  
**Expiration Date:** July 31, 2024

Contents

Stormwater Management Program Summary ..... 5

    Introduction   5

City of Bremerton Stormwater Management Program (SWMP) ..... 6

    Legal Authority ..... 6

    Bremerton Municipal Code..... 7

    Stormwater Planning S5.C.1 ..... 7

**S5.C.1.a Convene an Inter-Disciplinary Team       8**

**S5.C.1.b Coordination with Long-Range Plan Updates   8**

**S5.C.1.c Low Impact Development (LID) Code-Related Requirements   8**

**S5.C.1.d Stormwater Management Action Planning (SMAP)       9**

    Public Education and Outreach S5.C.2..... 9

**S5.C.2    Provide an education and outreach program    9**

    Phase II Municipal Stormwater Permit Activities ..... 10

**S5.C.2.a.ii.(b)    Measure the understanding and adoption of targeted behaviors**  
         **10**

    Public Involvement and Participation S5.C.3 ..... 10

**S5.C.3.a            Public Participation for development and implementation of the**  
         **SWMP   11**

**S5.C.3.b            Post the Stormwater Management Plan (SWMP) on the City’s**  
         **website   11**

    MS4 Mapping and Documentation S5.C.4 ..... 11

**S5.C.4.a Ongoing Mapping   12**

**S5.C.4.b New Mapping 12**

**S5.C.4.c Electronic Format Mapping 12**

**S5.C.4.e Providing Mapping to Other Permittees   12**

    Illicit Discharge Detection and Elimination S5.C.5 ..... 13

**S5.C.5.c            Prohibit non-stormwater and illicit discharges to the MS4    14**

**S5.C.5.c.i         Allowable Discharges BMC 15.04.190.c:   14**

**S5.C.5.c.ii        Conditional non-stormwater discharges BMC15.04.190.d:   14**

<b>S5.C.5.c.iii</b>	<b>Address discharges identified as significant sources of pollutants</b>	
15		
<b>S5.C.5.c.iv</b>	<b>Escalating enforcement procedures and actions</b>	<b>16</b>
<b>S5.C.5.d</b>	<b>Implement an IDDE Program</b>	<b>16</b>
<b>S5.C.5.e.iv</b>	<b>The Permittee shall implement a compliance strategy</b>	<b>17</b>
<b>S5.C.5.f</b>	<b>Permittees shall train IDDE staff</b>	<b>17</b>
<b>S5.C.5.g</b>	<b>Record Keeping</b>	<b>18</b>
<b>Controlling Runoff from New and Redevelopment, and Construction Sites S5.C.6 ... 18</b>		
<b>S5.C.6.a</b>	<b>Runoff from re/development and construction sites</b>	<b>18</b>
<b>S5.C.6.b.i</b>	<b>Minimum Requirements and Technical Thresholds</b>	<b>19</b>
<b>S5.C.6.b.ii</b>	<b>Reduce discharge of pollutants to MEP, and satisfy State AKART</b>	
19		
<b>S5.C.6.b.iii</b>	<b>Legal authority to inspect private stormwater facilities</b>	<b>20</b>
<b>S5.C.6.c</b>	<b>Permitting process with site plan review, inspection and enforcement</b>	
20		
<b>S5.C.6.d</b>	<b>Notice of Intent for Construction Activity</b>	<b>22</b>
<b>S5.C.6.e</b>	<b>Stormwater Training for Development Staff</b>	<b>23</b>
<b>Pollution Prevention and Operation and Maintenance for Municipal Operations S5.C.7</b>		
23		
<b>S5.C.7.a</b>	<b>Establish Maintenance Standards</b>	<b>23</b>
<b>S5.C.7.a.ii</b>	<b>Maintenance Requirements Identified During Inspections</b>	<b>24</b>
<b>S5.C.7.b</b>	<b>Maintenance of Stormwater Facilities Regulated by the Permittee</b>	
24		
<b>S5.C.7.c</b>	<b>Maintenance of Stormwater Facilities Owned or Operated by the Permittee</b>	
24		
<b>S5.C.7.c.i</b>	<b>Annual Inspection Program</b>	<b>25</b>
<b>S5.C.7.c.ii</b>	<b>Spot Check Inspection After Major Storm Events</b>	<b>25</b>
<b>S5.C.7.c.iii</b>	<b>Inspection of catch basins and inlets owned by the Permittee</b>	<b>25</b>
<b>S5.C.7.c.iv</b>	<b>Compliance with inspection requirements criteria</b>	<b>25</b>
<b>S5.C.7.d</b>	<b>Implement practices to reduce stormwater impacts from City properties</b>	
26		
<b>S5.C.7.e</b>	<b>Implement an ongoing training program for employees</b>	<b>27</b>
<b>S5.C.7.f</b>	<b>Implement a SWPPP for all equipment maintenance or storage yards</b>	<b>28</b>
<b>S5.C.7.g</b>	<b>Record of inspections and maintenance requirements</b>	<b>28</b>
<b>Source Control Program for Existing Development S5.C.8..... 28</b>		

**S5.C.8.a Implement a Program to Prevent and Reduce Pollutants in Runoff From Areas That Discharge to the MS4 28**

**S5.C.8.b Minimum Performance Measures of Source Control Program 29**

**S5.C.8.b.i Source Control BMPs 29**

**S5.C.8.b.ii Potential Pollutants to MS4 29**

**S5.C.8.b.iii Inspection Program for Potentially Polluting Sites 30**

**S5.C.8.b.iv Progressive Enforcement Policy for Non-Compliance with Stormwater Policy 30**

**S5.C.8.b.v Source Control Program Staff Training 30**

Activities Planned for 2021 ..... 31

Stormwater Comprehensive Plan Update ..... 31

Public Education and Outreach..... 31

Public Involvement ..... 31

Illicit Discharge Detection and Elimination (IDDE) ..... 32

Control Runoff from New Development, Redevelopment & Construction Sites ..... 32

Municipal Pollution Prevention, Operation, and Maintenance ..... 33

Compliance with Total Maximum Daily Load (TMDL) Requirements ..... 34

**Water Quality Improvement Projects 35**

**IDDE Actions: 35**

**Maintenance Actions: 36**

**Pet waste 36**

**Wastewater 36**

**Reporting and record keeping 36**

**Capital Improvement Plan – 2021 Projects 37**

2019-24 Stormwater Permit ..... 38

**Comprehensive Stormwater Planning 38**

**Coordination with Long-Range Plans 38**

**Stormwater Management Action Planning 39**

**Public Education and Outreach 39**

**System Mapping and Documentation 40**

**Operation and Maintenance 40**

**Source Control Program for Existing Development 40**

## Stormwater Management Program Summary

### Introduction

Stormwater runoff flows over impervious surfaces such as paved streets, parking lots, building rooftops, and is not able to infiltrate into the ground. Stormwater systems are constructed to control runoff and convey water to streams, lakes, and marine water ways. Runoff picks up pollutants like trash, chemicals, oils, dirt and sediment that can harm our streams, lakes, and Puget Sound. To protect these resources, best management practices (BMPs) were developed and are being implemented. Correct use of BMPs prevents erosion, eliminates potential pollutants at the source, removes pollutants in runoff, and protects water quality.

The Environmental Protection Agency (EPA) developed the National Pollutant Discharge Elimination System (NPDES) Permit, to regulate discharges from Small Municipal Separate Storm Sewers Systems (MS4s). Washington State Department of Ecology was delegated authority to implement this program and issues the stormwater permit to counties, cities, and the Washington State Department of Transportation. Bremerton is a Phase II Municipal Stormwater Permittee because the population is less than 100,000.

Recognizing the need to control stormwater runoff and maintain the system, Bremerton established its Stormwater Utility through Ordinance 4454 in 1994 as codified in the Bremerton Municipal Code (BMC) 15.04 - Stormwater. User fees established under BMC Title 3.01 Rates and Fees, provide funding for the Stormwater Utility. In addition, the City has also reviewed and updated the City's Comprehensive Plan and Land Use code to support stormwater management as development occurs, through updated policies and development regulations.

Program activities planned for 2021 are summarized in this Stormwater Management Program (SWMP) Plan. Permit required activities are addressed in the same order listed in the Permit. Each section has a short description of minimum performance measures and a summary of the existing or planned program components to fulfill the requirement. The Stormwater Program complies with Growth Management Act, Bremerton's City Comprehensive Plan, Shoreline Master Plan, and supports the City's Stormwater Comprehensive Plan which provides long range operational and capital improvement guidance for the Utility.

Bremerton's Stormwater Utility manages system assets, budget, capital improvements, operation, maintenance, construction, street sweeping, environmental monitoring, and public education. Education and outreach provide the community with knowledge and tools to prevent and reduce stormwater pollution by changing practices that help to reduce pollution at the source. The City uses and promotes low impact development (LID) practices, which helps minimize the impact of stormwater from the urban landscape. Stormwater treatment is included with transportation projects, facility

improvement projects, and in targeted areas to improve the quality of runoff across the city. All new and re-development that meets the LID threshold is required to include these practices and BMPs in their plans or prove that LID is not feasible.

The broad-ranging Permit regulates activities that impact stormwater quality and quantity from the City's stormwater system. These requirements affect businesses, residents, development, and city activities. Bremerton's Public Works & Utilities (PW&U) Department coordinates, implements, provides compliance oversight, and reporting for the Permit.

### City of Bremerton Stormwater Management Program (SWMP)

The goals of the Stormwater program are:

- Comprehensive Stormwater Management Planning,
- Effectively and proactively manage, operate, and maintain the stormwater system,
- Strive to effectively manage stormwater runoff within the City limits,
- Comply with NPDES Stormwater Permit requirements,
- Provide acceptable level of service,
- Prevent flooding,
- Protect environmental resources by:
  - Improving and protecting water quality,
  - Reducing stormwater runoff quantity,
- Promote pollution prevention through education and inspections,
- Maintain and update GIS system map,
- Upgrade and replace older and failing assets,
- Identify and prioritize water quality improvement retrofit sites,
- Install, monitor, and maintain water quality retrofit treatment systems,
- Assess and prioritize watershed water quality goals,
- Comply with Total Maximum Daily Load (TMDL) requirements (water quality cleanup),
- Maintain a balanced budget for the program.

### Legal Authority

The City of Bremerton established its Stormwater Utility pursuant to Ordinance 4454 in 1994 as codified in the Bremerton Municipal Code (BMC) 15.04 - Stormwater. Funding for the Stormwater Utility is provided by user fees as codified in Bremerton Municipal Code (BMC) Title 3.01 Rate and Fees. Bremerton's SWMP is updated annually as required by the Western Washington Phase II Municipal Stormwater Permit. The Stormwater Program complies with Growth Management Act, supports the City's Comprehensive Plan, and the City's Stormwater Comprehensive Plan which provides long range operational and capital improvement guidance for the Utility. The Capital Improvement Program (CIP) identifies planned capital projects and is updated annually during the budget process.

### Bremerton Municipal Code

BMC 15.04 Stormwater establishes rules and regulations to control erosion and sediment control.

Bremerton was issued the Western Washington Phase II Municipal Stormwater Permit (Permit) on January 16, 2015, by the Washington State Department of Ecology (DOE). Regulatory statutes governing this Permit are the State of Washington Water Pollution Control Law, Chapter 90.48 Revised Code of Washington (RCW) and the Federal Water Pollution Control Act (The Clean Water Act) Title 33 United States Code, Section 1251 *et seq.*

The current Stormwater Comprehensive Plan (Plan) was adopted by City Council in January 2009. This Plan is being updated and will be completed in 2021. The Plan includes long range goals, a 20-year comprehensive capital improvement plan, and cost estimates, updated basin boundaries, and sub-basins. The Plan will provide program direction for the next 6 years and includes known system needs for the next 20 years. The Plan coordinates the Stormwater Program with the City's Comprehensive Plan, requirements of the Permit, and goals of the Puget Sound Partnership's Strategic Initiatives and Action Agenda goals. Surface and stormwater system water quality, quantity, system deficiencies, programmatic needs, operation and maintenance, staffing, stormwater treatment, LID implementation, capital program, and fish barriers will be highlighted.

Implementation of the SWMP is tracked and evaluated to improve the program and to fulfill Permit requirements. Cost for development and implementation of the SWMP is tracked through the financial system by various requirements of the Permit. Bremerton has partnered with other agencies and cities to coordinate stormwater related policies, public education, programs, and projects through interlocal agreements and coordination groups.

Bremerton's SWMP is designed to reduce the discharge of pollutants from its MS4 to the Maximum Extent Practicable (MEP) and protect beneficial uses of local receiving waters. The Program meets state requirements for use of all known, available, and reasonable methods of prevention, control, and treatment (AKART) to protect water quality.

### Stormwater Planning S5.C.1

*The objective of watershed-scale stormwater planning is to identify a stormwater management strategy or strategies that would result in hydrologic and water quality conditions that fully support "existing uses," and "designated uses," as those terms are defined in WAC 173-201A-020, throughout the stream system.*

Planning and project implementation is underway for Ostrich and Oyster Bays, and other watersheds will be added as Bremerton moves forward. Certain areas between

Kitsap County and Bremerton will benefit from smaller watershed scale restoration and preservation planning efforts that are identified in future CIP projects. One planning project for the Oyster and Ostrich Bay Watershed is moving forward as a Near Term Action with the Puget Sound Partnership Action Agenda. As projects are identified through the Stormwater Management Action Planning (SMAP) effort, they will be included in the Stormwater Program's Capital Improvement Program (CIP) Plan. Although not directly associated with stormwater, the WRIA 15 Watershed Restoration and Enhancement planning and implementation will have positive impact to aquifers, drinking water and stream flows. Bremerton's Water Resources and Community Development are actively involved with these processes.

#### S5.C.1.a Convene an Inter-Disciplinary Team

Kitsap County and City of Bremerton are both Phase II Permittees and work closely with other cities and agencies on the Kitsap Peninsula to coordinate stormwater pollution prevention and reduction. Preparation for city-wide watershed planning has begun and continues with issuance of the new Permit in August of 2019. Kitsap County and Port Orchard will be included in the process where runoff intermingles before reaching waters of the state.

#### S5.C.1.b Coordination with Long-Range Plan Updates

*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.*

This year an in-depth review of stormwater program processes, policies, goals, and expected outcomes of internal efforts as well as integrated regional coordination will be completed. A stronger, more dynamic, and effective program is expected to be developed through this detailed review of planning and setting informed program goals to protect and improve water quality in and around Bremerton. This process will develop a report and identify changes to be implemented in the city-wide Stormwater Program.

#### S5.C.1.c Low Impact Development (LID) Code-Related Requirements

LID is fully integrated and supported in Bremerton's development codes, standards, rules, and adopted manuals, effective December 31<sup>st</sup>, 2016. LID is the preferred and commonly used approach to site development to provide developers with guidelines that protect and improve storm water quality. In 2021, efforts to improve LID code and planning support will be completed through program evaluation. Appropriate members



of the coordination group will be used to identify areas where process, alternatives selection, and implementation can be completed.

#### S5.C.1.d Stormwater Management Action Planning (SMAP)

The City of Bremerton is completing Stormwater Management Action Planning as outlined in the Stormwater Management Action-Planning Guidance provided by Ecology (Ecology, 2019; Publication 19-10-010). The effort will use existing data and determine which watershed would benefit most from prioritized actions to restore water quality and improve overall habitat.

The program includes development of a watershed inventory table as a deliverable to Ecology by March 2022, along with a prioritized list of receiving waters by June 2022. Development of a SMAP for two high priority catchment areas will be completed and submitted to Ecology by March 2023.

#### Public Education and Outreach S5.C.2

Bremerton's education program goal is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. Brochures, signs on street sweepers, utility bill inserts, school and other public presentations, e-news, display booths at community events, and targeted business-specific mailings are methods used to provide information to residents, businesses, industries, elected officials, and policy makers.

#### S5.C.2 Provide an education and outreach program

The City of Bremerton has partnered with Kitsap County Public Works, through an inter-local agreement, and many other regional agencies to form the West Sound Stormwater Outreach Group (WSSOG). The WSSOG collaborative effort develops, implements, and funds stormwater education, outreach messages, materials, activities, and program assessment tools for the general public, businesses, and other target audiences as required by the Permit.

This regional program provides education and outreach with a consistent message through sharing of resources and ideas. WSSOG educational materials are used within Bremerton's existing programs including pet waste management, outreach to the automotive industry, vehicle maintenance, paint and household hazardous chemical disposal, the regional spills reporting hotline, and natural yard care. Bremerton promotes the use of the Kitsap County Moderate Risk Waste Facility.

Pet waste bag dispensers have been placed throughout Bremerton to raise awareness of the impact from pet waste left on the sidewalks and in our parks and to promote behavior change. The pet waste management program is used to meet permit requirement S5.C.2.a.ii, to affect behavior change in a target audience, and to meet the

TMDL requirement in the Permit. More than 50 City owned and maintained dispensers are installed in parks, public right-of-way, and on City-owned properties. Residents in Bremerton can request pet waste bag dispensers through the WSSOG ILA program and will maintain the unit under the terms of the agreement they must sign. There are several throughout the city that are maintained through this program. Additional dispensers are at the Port of Bremerton Marina and on private properties around Bremerton. Bremerton provides over 180,000 bags per year and will continue this service in 2021.

Several large educational signs that support the “Puget Sound Starts Here” campaign and promote spills reporting were posted at city-owned facilities including parking garages, police and fire stations, and Public Works facilities. Other opportunities will be looked for in the upcoming year. A new natural yard care campaign is being developed through WSSOG.

A residential rain garden program was implemented in 2017 for a targeted area to separate stormwater from the sanitary sewer and to see how well the program worked. In late 2019 Bremerton entered into an interlocal agreement with Kitsap Conservation District to continue the program city-wide through 2022. The expanded rain garden program provides stormwater management, pollution prevention, and water conservation educational and outreach information support to all areas within the city.

## Phase II Municipal Stormwater Permit Activities

### S5.C.2.a.ii.(b) Measure the understanding and adoption of targeted behaviors

Public education activities are tracked and coordinated with West Sound Stormwater Outreach Group (WSSOG), and through information provided at events. Bremerton provides additional education and outreach efforts as opportunities arise and will continue this effort in 2021. Outreach efforts such as the Sinclair Inlet Cleanup (held in April and September), the Water Festival, public access TV, and other opportunities will be utilized in 2021 to expand the audience base. Current programs are being evaluated for effectiveness, and new programs are in the conceptual phase for implementation in upcoming years.

### Public Involvement and Participation S5.C.3

The City of Bremerton recognizes the inherent value of public involvement and participation in the Stormwater Program and encourages the public to become involved. Bremerton solicits ideas and opinions through the City’s website, Utility bill messages, e-News emails to customers, and has provided a survey specific to stormwater on its website.

Bremerton’s “Stormwater Permit Coordinator” coordinates the Bremerton portion of “Sinclair Inlet Cleanup”, a volunteer cleanup effort supported by local agencies, business, and residents that was established in 1995. Stormwater educational materials and program information is provided and displayed at this event. The cleanup

volunteers collect trash and discarded objects from the shorelines around Bremerton and many local streets and installs storm drain markers when teams are available. Markers are provided to Bremerton's schools and local neighborhoods upon request.

Public access TV and social media will be used in 2021 to encourage participation in program development and give residents ideas of how they can make a difference. Public involvement, participation, and partnerships for the Stormwater Program include LID guidance, assistance, and site assessments to identify opportunities for business and residents.

#### S5.C.3.a      Public Participation for development and implementation of the SWMP

*Create opportunities for the public to participate in the decision-making processes involving the development, implementation, and update of the Permittee's entire SWMP.*

Public comment and participation is encouraged and accepted through Bremerton's website, customer email list, direct contact, customer response calls, the Permitting Center, and the Utility's customer service division. There is an online stormwater survey, and the public can email comments or suggestions about Bremerton's stormwater program to the Stormwater Permit Coordinator. Efforts to get more public involvement will continue in 2021.

#### S5.C.3.b      Post the Stormwater Management Plan (SWMP) on the City's website

This 2021 SWMP is posted on Bremerton's website at: <http://www.bremertonwa.gov/DocumentCenter/View/1193> along with the 2020 annual report.

#### MS4 Mapping and Documentation S5.C.4

Bremerton's stormwater system GIS map encompasses the entire geographic area served, including areas of adjacent jurisdictions, all outfalls, receiving waters, stormwater treatment facilities, tributary areas, conveyance types, material, size, land use, and other items as required by the Permit. All connections between the city's MS4 and other agencies are in the mapping system. The GIS system includes the systems of neighboring agencies that discharge into Bremerton's MS4 and where Bremerton discharges into adjacent systems. System data is shared between the city and neighboring agencies as requested through an agreement. New stormwater treatment and flow control BMPs are added as construction is completed and the information is instantly available on handheld tablets for field staff to use when needed.

All known public and private stormwater facilities and conveyances within the City limits are in the map or on various layers that can be turned on and off to make the map legible and easy to view details. The GIS map has the ability to add layers for land use, topography, associated drainage areas, and areas that do not drain to surface waters which aides in illicit discharge detection and elimination. Drainage basins and sub-basin areas were updated in 2020.

#### S5.C.4.a Ongoing Mapping

Improvements to the maps, layers, and functionality of the system will continue in 2021.

#### S5.C.4.b New Mapping

*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.*

This requirement has been completed and outfall locations of all sizes are clearly identified on GIS maps. Pipe size, and material are included in the attribute table and updated as needed.

The 2019 Permit has many new requirements for system mapping that include identifying all discharges from the MS4 to privately owned systems, having data in an all-electronic format that includes GIS, CAD drawing, or other software that can map and store points, lines, polygons, and associated attributes, and fully described mapping standards. This is mostly complete but will be finished by the due date of August 1, 2021.

#### S5.C.4.c Electronic Format Mapping

The stormwater system is mapped with ESRI ArcMap (GIS) and details are continually added to the layers of the map by GIS technicians and field staff. This is an ongoing project, and an important part of the Stormwater Utility functions. Asset management was a focal point in 2020 and is a primary focus in 2021. A new Asset Manager position is proposed to be filled in 2021 to provide support for developing the water, sewer, and stormwater asset management system. New system features and components are added to the GIS map after they are constructed and verified by field inspections. Field crews carry handheld tablets with them for quick access to system information and update system maps as changes occur or when errors are discovered. System development and support will continue in 2021. An important improvement to this system was an upgrade to the GIS servers and network software in 2019 that allows better access to data from portable tablets, as well as desktop systems.

#### S5.C.4.e Providing Mapping to Other Permittees

*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.*

Bremerton will share stormwater system data as requested. A “Memorandum of Understanding” with Kitsap County is in place to support ongoing stormwater system map sharing including system details, features, and general information where our systems merge and includes support for IDDE tracking and source control. A similar agreement will be made with the City of Port Orchard and Mason County in 2021 to complete our cross-jurisdictional drainage data.

#### Illicit Discharge Detection and Elimination S5.C.5

An illicit discharge is one that violates water quality or sediment standards or is a significant contributor of pollutants to waters of the United States. This may include a discharge from any conveyance or system of conveyances used for collecting and conveying storm water runoff or a system of discharges from municipal separate storm sewers, including any spills not under the purview of another responding authority, into the MS4.

The City has an ongoing program to detect and remove illicit connections and discharges. Some of the oldest areas in Bremerton have combined sewers so stormwater goes to the sanitary sewer system and is treated at the wastewater treatment plant before being discharged into Sinclair Inlet. Regardless of this fact, the consistent message in Bremerton is, “Only Rain Down the Drain” to simplify the message and address illicit discharges and prevention equally. The spill reporting hotline phone number and email address is prominently displayed on the sides of Bremerton’s large street sweepers. The Illicit Discharge Detection and Elimination (IDDE) program started in 1995 has continued to evolve as regulations change so the program complies with the Permit requirements.

For 2021, the program will continue to monitor water quality at outfalls using the dry weather sampling plan and will respond to notifications and complaints when they are submitted. This year sampling and system inspections will work further up into the stormwater system to look for water quality issues and will respond as needed.

Environmental Tracking Systems Reports (ERTS) from Ecology are recorded and dispatched to trained staff from Public Works, or Fire Departments if needed. Procedures are in place to provide staff guidance on how to proceed with these incidents.

Spills occur and are reported in various ways to Public Works. The incident report and the amount of material dictate the City’s response level. Response is a coordinated effort with Public Works staff as lead responders for most events. Bremerton’s Fire Department responds to larger incidents with Puget Sound Naval Shipyard Hazmat Unit and Washington State Department of Transportation as backup resources. In 2020, Bremerton purchased several new spill kits, cleanup supplies, and distributed them throughout the city to various facilities. A portable vacuum system for cleanups was purchased and installed on a trailer for quick dispatch to incidents. Many Public Works and Utilities staff are trained to operate this equipment.

S5.C.5.c Prohibit non-stormwater and illicit discharges to the MS4

*Implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the MS4 to the maximum extent allowable under State and Federal law.*

Bremerton has implemented an ordinance to effectively prohibit non-stormwater, illicit discharges into the MS4 to the maximum extent allowable under state and federal law. Bremerton Municipal Code (BMC) 15.04.190 PROHIBITED ACTS includes a list of “Prohibited Discharges, BMC 15.04 190(b)”, including non-stormwater, illegal discharges, and actions such as dumping, damaging, or removing facilities of the MS4. Violations under this section are punishable as a misdemeanor and escalating enforcement is authorized pursuant BMC Title 1.12 General Provisions, Code Enforcement.

The BMC is updated as needed to comply with changing requirements and is currently in compliance with the Permit. BMC updates will be made in 2021 to meet new Permit requirements to support program compliance and enforcement.

Below are allowable and conditional discharges per BMC:

S5.C.5.c.i Allowable Discharges BMC 15.04.190.c:

- *Air conditioning condensation;*
- *Discharges from emergency firefighting activities; (G3 reporting required as follow up)*
- *Diverted stream flows;*
- *Flows from riparian habitats and wetlands;*
- *Footing drains;*
- *Foundation drains;*
- *Irrigation water from agricultural sources that is commingled with urban stormwater;*
- *Non-stormwater discharges authorized by another NPDES or state waste discharge permit;*
- *Rising ground waters;*
- *Springs;*
- *Uncontaminated ground water infiltration as defined in 40 CFR 35.2005(20); and*
- *Uncontaminated pumped ground water;*
- *Uncontaminated water from crawl space pumps.*

Stormwater pollution prevention efforts include standard operating procedures, and education for utility staff, and brochures addressing pollution prevention and water conservation for the public.

S5.C.5.c.ii Conditional non-stormwater discharges BMC15.04.190.d:

(d) Conditional Discharges. The following types of discharges shall not be considered illegal discharges, if they meet the stated conditions, or unless the City determines that

the type of discharge, whether singly or in combination with others, is causing or is likely to cause pollution of surface water or groundwater:

- *Potable water, including water from water line flushing, hyper chlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. These planned discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted, if necessary and in volumes and velocities controlled to prevent resuspension of sediments in the stormwater system.*
- *Lawn watering and other irrigation runoff. These types of discharges shall be permitted if the amount of runoff is minimized through water conservation efforts.*
- *Dechlorinated swimming pool/hot tub discharges. These discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted and reoxygenized if necessary, volumetrically and velocity controlled to prevent resuspension of sediments in the stormwater system. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool/hot tub wastewater and filter backwash shall not be discharged to the stormwater system.*
- *Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents shall be permitted, if the amount of street wash and dust control water used is minimized and catch basin inserts designed to treat and/or filter wash water prior to entry into the stormwater mains are installed. At active construction sites, street sweeping must be performed prior to washing the street and catch basin inserts designed to treat and/or filter wash water prior to entry into the stormwater mains must be installed.*
- *Nonstormwater discharges covered by another NPDES permit. These discharges shall be in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations.*
- *Other nonstormwater discharges. These discharges shall be in compliance with the requirements of a stormwater pollution prevention plan (SWPPP) reviewed and approved by the City, which addresses control of such discharges by applying AKART to prevent contaminants from entering surface or ground water.*

These requirements are supported by standard operating procedures for City Staff and public education of residents and businesses.

S5.C.5.c.iii Address discharges identified as significant sources of pollutants

*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.*

Bremerton's IDDE program monitors the MS4 for potential cross connections and enforces corrective actions as authorized by BMC 15.04. The Permit water quality and sediment standards compliance requirements also define parameters that are used to support enforcement actions. Standard operating procedures for City Staff, along with public education of residents and businesses, work to prevent these discharges from occurring. Continued effort to prevent contamination of runoff, identify illicit discharges, and take corrective action will occur in 2021.

#### S5.C.5.c.iv Escalating enforcement procedures and actions

*The ordinance or other regulatory mechanism shall include escalating enforcement procedures and actions.*

BMC section 15.04.210 Violation Enforcement – Penalty, provides an escalating enforcement strategy up to and including civil financial penalties, BMC Title 1.04 Code Enforcement, and/or confinement in Jail per BMC Title 1.12 General Provisions, Code Enforcement. In 2021, these codes and provisions will be reviewed and updated as needed to be more effective.

#### S5.C.5.d Implement an IDDE Program

*Implement an ongoing program to detect and address non-stormwater discharges, including spills, and illicit connections into the MS4.*

Bremerton's Illicit Discharge Detection and Elimination (IDDE) Program addresses this requirement and has an ongoing program to inspect stormwater system outfalls and private stormwater systems annually. This program is a key component to reduce stormwater pollution and the impact to local waters.

Bremerton is a predominantly urban area with 25 miles of marine shoreline, including a large portion of Kitsap Lake. The urban portion of the City has residential, commercial, and industrial areas. The city also owns around 8,300 acres of the Union River watershed and a significant portion of the Gorst Creek watershed. The Union River provides a large portion of the drinking water supply for Bremerton.

Bremerton's IDDE program actively looks for non-stormwater discharges, spills, illicit connections, and illegal dumping into the MS4. The Program has identified priority urban areas likely to have illicit discharges and has defined field assessment activities. All outfall locations have been documented and are screened for illicit discharges.

Bremerton has had an ongoing dry weather outfall reconnaissance inventory program since 1997. All outfalls discharging to marine and fresh waters have been inventoried, inspected, and screened. In 2021, designated stormwater outfalls will be inspected during dry weather and screened for illicit connections.



Bremerton utilizes a Customer Response Line (360-473-5920), 911, the Bremerton1 cell phone application, and the regional hotline KITSAP1 (360-337-5777), and Kitsap County's ClickFix which is monitored by Kitsap County Public Works. Bremerton's staff are dispatched by a central operator based on the information provided by the caller or application reporter. If the call is non-specific, the Customer Response Technician will go to the site and determine who needs to be dispatched for incident control and follow-up, in accordance with PW&U's policies. The responder's investigation report and resolution are recorded in a database with the call information to help identify areas of concern in the MS4. This system provides quick response for incidents involving the MS4 by dispatching the appropriate staff for the situation. All reports are logged and tracked from the initial report through resolution in a database.

For incidents that are beyond City staff capabilities, Bremerton alerts hazmat responders through 911 and other responsible agencies such as the Department of Ecology, Kitsap Department of Emergency Management, and Kitsap Health District regional partners.

Investigations generally follow the Ecology 2013 *Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual*. Bremerton staff are trained to recognize illicit discharge to the stormwater system and procedures are in place to report, investigate, document, and resolve incidents when found or reported.

The "Spills Happen, Help Us Find Them" graphic with reporting phone number is on City street sweepers and used in public outreach efforts.

S5.C.5.e.iv     The Permittee shall implement a compliance strategy

*The compliance strategy includes informal compliance actions such as public education and technical assistance as well as the enforcement provisions of the ordinance or other regulatory mechanism.*

Source control BMPs, referenced in Volume IV of the Stormwater Management Manual for Western Washington (SWMMWW), have been incorporated into Bremerton's development plan review, inspection, and operations programs by adopting Ecology's SWMMWW as the standard manual. Bremerton's stormwater facilities are maintained in accordance with maintenance standards required by the SWMMWW. Bremerton's ordinance, Stormwater Facility Maintenance Manual, and adopted manuals provide guidance, set standards and provide the compliance strategy.

S5.C.5.f     Permittees shall train IDDE staff

Bremerton staff are responsible for identification, investigation, reporting, cleanup of illicit discharges, and termination, including spills and illicit connections. Staff involved in this program are trained to conduct these activities. Presentations, round table discussions, training videos, and classes are tools employed to train staff. Follow-up training is provided as needed to address changes in procedures, techniques,

requirements or staffing. Training records are kept to document which staff are trained and who needs refresher training. Training needs will be reviewed and provided to staff in 2021.

#### S5.C.5.g Record Keeping

*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 (NPDES permit) Appendix 12 and WQWebIDDE. Each Permittee may either use their own system or WQWebIDDE for recording this data. Final submittals shall follow the instructions, timelines, and format as described in Appendix 12.*

The Customer Response investigation report and resolution are recorded in a database with the call information to help identify areas of concern in the MS4. This system provides quick response for incidents involving the MS4 by dispatching the appropriate staff for the situation. All reports are logged and tracked from the initial report through resolution in a database. A cloud-based system will be implemented in 2021 to centralize construction inspections for TESC, and source control inspections, and maintenance action of some systems.

#### Controlling Runoff from New and Redevelopment, and Construction Sites S5.C.6

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

Bremerton has reviewed and updated development requirements and applies these to both public and private projects. Road redevelopment projects, specific site re/development requirements for City projects are the same as those for private property endeavors for stormwater LID, Temporary Erosion Sediment Control (TESC), stormwater treatment, and retrofits.

#### S5.C.6.a Runoff from re/development and construction sites

*Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects. The local program adopted to meet these requirements shall apply to all applications submitted on or after January 1, 2017 and shall apply to applications submitted prior to January 1, 2017, which have not started construction by January 1, 2022.*

Bremerton's municipal code, City Comprehensive Plan, and the Stormwater Comprehensive Plan support Low Impact Development (LID) as the preferred method for re/development as of December 31, 2016. Ecology's Stormwater Management

Manual for Western Washington (SWMMWW) is Bremerton's adopted manual as of December 31, 2016. Site development planning requires LID to be included in the development and reviewed by staff for acceptance and approval. Tools to help developers comply with these requirements will continue to be developed and implemented in 2021. Technical assistance will be provided to fully implement and gain the most benefit from these new regulations.

#### S5.C.6.b.i Minimum Requirements and Technical Thresholds

*The Minimum Requirements, thresholds, and definitions in Appendix 1 or a program approved by Ecology under the 2013 NPDES Phase I Municipal Stormwater Permit, 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.*

Bremerton's development and permitting codes and the adopted Stormwater Management Manual for Western Washington (SWMMWW) meet these requirements.

#### S5.C.6.b.ii Reduce discharge of pollutants to MEP, and satisfy State AKART

*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 2013 Phase I Permit) will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy the State requirement under chapter 90.48 RCW to apply AKART prior to discharge:*

- (a) Site planning requirements*
- (b) BMP selection criteria*
- (c) BMP design criteria*
- (d) BMP infeasibility criteria*
- (e) LID competing needs criteria*
- (f) BMP limitations*

*Permittees shall document how the criteria and requirements will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy State AKART requirements. Permittees who choose to use the requirements, limitations, and criteria above in the Stormwater Management Manual for Western Washington (SWMMWW), or a program approved by Ecology under the 2013 Phase I Permit, may cite this choice as their sole documentation to meet this requirement.*

Bremerton adopted the Stormwater Management Manual for Western Washington (SWMMWW) as a guiding document and meets the requirement of S5.C.4.a.ii. All site plans are reviewed by the Development Engineer, Department of Community Development and other city staff as needed. The Development Engineer requires the

appropriate stormwater Best Management Practices (BMPs), Temporary Erosion Sediment Control (TESC), Stormwater Pollution Prevention Plan (SWPPP) as required to meet the City's NPDES Permit and the BMC.

S5.C.6.b.iii      Legal authority to inspect private stormwater facilities

*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.*

Legal authority to inspect private stormwater facilities is provided in BMC Titles 15.04.090, 15.04.100, 15.04.140, 15.04.160 and is included in the permitting process.

S5.C.6.c            Permitting process with site plan review, inspection, and enforcement

*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.4.a.i, above.*

- i.            Review of all stormwater site plans for proposed development activities.*

All site plans are reviewed by the Development Engineer, Department of Community Development and other city staff as needed. When thresholds are met, the Development Engineer requires the appropriate stormwater BMPs, TESC, SPCC, and SWPPP to meet the Permit and BMC requirements including critical area and shoreline review.

- 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.4.a.i, above.*

All sites are inspected prior to clearing, after a development permit request is submitted. Sites are assumed to have high potential for sediment transport in Bremerton due to the soils and required to utilize BMPs as identified in the site specific TESC plan as approved by the Development Engineer. If the BMPs are not sufficient to meet water quality standards alternative treatment or other options are required to be implemented up to and including treatment prior to entering the city's stormwater system or sanitary sewer system if permitted to do so.

- 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.*

The Bremerton development permit process requires ongoing erosion control inspection as part of their conditions of approval for an issued permit. All sites are inspected at least 3 times per week during construction to verify proper installation, operation, and maintenance of TESC. Permit holders are notified of deficiencies and progressive enforcement is used when necessary. Bremerton's inspection staff are Certified Erosion and Sedimentation Control Lead (CESCL) and receive updated training as needed.

- 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.*

All active construction sites are inspected during dry and wet weather at least three times per week. Inactive sites are also monitored regularly for erosion and sediment control concerns during rainfall, and for trash accumulation year around. Maintenance of these systems is required when the system feature meets threshold levels or when vegetation control is 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.*

A final inspection of all stormwater system additions and features is completed for all projects. All stormwater attributes in the new system are cleaned and re-inspected prior to closing out the project. Permit procedures require a maintenance manual to be submitted and approved for the project prior to occupancy. The manual provides a maintenance schedule the owner can follow for future maintenance needs and documentation. Ownership and maintenance responsibility are assigned at final approval through a recorded maintenance covenant for large commercial or project with Home Owners Associations (such as land divisions or multifamily developments). Bremerton's municipal code supports and further defines system maintenance and operation responsibilities.

- vi. *Compliance with the inspection requirements in (ii), (iii) and (iv) 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 scheduled inspections.*

All active construction sites are regularly inspected three times per week throughout the year. Inactive sites are monitored for erosion, sediment, and trash accumulation year-round. All locations are monitored during rainfall events and owners are notified if TESC needs to be improved or maintained. Bremerton's inspector uses a tablet with access to the City's GIS system to record these inspections in an application developed by the city. If that system is not functioning, they will document the inspection in a book specifically for site inspections and input the information into the digital record when available.

- 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.*

Records of inspections and enforcement actions for privately owned and operated systems are kept on file. We are in the process of setting up a cloud-based inspection documentation system that will be used for erosion and sediment control and source control site inspections that can be used via smart phone, and various computers that are web enabled. This set up will be completed and system implemented in 2021. Warning letters, notices of non-compliance, stop work orders for construction sites will be stored in this new system as old records are kept on-file with the city's development engineering group.

- viii. An enforcement strategy shall be implemented to respond to issues of non-compliance.*

An enforcement strategy is in place and supported by BMC 15.04, BMC 15.04.020 Adoption of Manuals where the SWMMWW is the guidance document for stormwater requirements, BMC 15.04.210 Violation Enforcement – Penalty and Chapter 1.04 Code Enforcement.

#### S5.C.6.d Notice of Intent for Construction Activity

- d) The program shall make available as applicable copies of the "Notice of Intent for Construction Activity" and copies of the "Notice of Intent for Industrial Activity" to representatives of proposed new development and redevelopment. Permittees shall continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.*

An information sheet with the Ecology website address for the "Notice of Intent" is provided to those seeking a development permit by DCD and Engineering at the City's Permit Counter. Sites that are covered by other permits are required to comply with Bremerton's stormwater requirements. Verification of an issued CSWGP will be added to the development permit checklist in mid-2021.

#### S5.C.6.e Stormwater Training for Development Staff

- 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 shall 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.*

Engineering and DCD staff are trained to complete their respective job duties. Staff whose position supports implementing the requirements that control stormwater runoff, pre and post construction, are trained for those specific functions. Field inspectors are provided Certified Erosion Sediment Control Lead (CESCL) training and certification. Staff that reviews plats, plan submittals, and associated development projects are educated in LID practices and techniques, regulations, plan review, and SWPPP development through in-house exercises, and stormwater conferences with specific workshops. This additional education provides a qualified work team that can also assist developers and property owners who wish to improve their property. This year, 2021, will include more stormwater program review, and implementation training support. Training provided for development plan review was started in 2020 and will be utilized in 2021 to ensure our staff benefit from the most recent education opportunities.

#### Pollution Prevention and Operation and Maintenance for Municipal Operations S5.C.7

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

Bremerton has an Operation and Maintenance (O&M) program with the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The maintenance program is divided into three groups: Stormwater Maintenance, Facilities Maintenance, and Parks Maintenance. Each group has their own system components and stormwater facilities to operate and maintain. The groups are trained to provide maintenance service for each of their facilities and features. A new digital tracking system is being implemented that will allow staff to enter actions using a web based browser to provide a centralized record of all activities and outcomes.

#### S5.C.7.a Establish Maintenance Standards

*Permittee shall implement maintenance standards that are as protective, or more protective, of facility function than those specified in Chapter 4 of Volume V of the Stormwater Management Manual for Western Washington, or a Phase 1 program approved by Ecology. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard. No later than June 30, 2022, Permittees shall update their maintenance standards as necessary to meet the requirements of this Section.*

Bremerton adopted and enforces the July 2019 edition of the SMMWW standards which meets this requirement. Bremerton's Operation and Maintenance Manual was updated in 2020 and will continue to evolve as new technologies are developed and approved. The O&M Manual is provided to system owners when requested and is a downloadable document from the City's website under Public Works and Utilities in the Stormwater section.

#### S5.C.7.a.ii Maintenance Requirements Identified During Inspections

*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.*

Bremerton completes maintenance on its permanent stormwater treatment and flow control BMPs/facilities annually or as needed based on inspection results. When deficiencies are found they are corrected immediately or within the next 30 days.

#### S5.C.7.b Maintenance of Stormwater Facilities Regulated by the Permittee

*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.*

Bremerton's stormwater development codes provide provisions and mechanisms that require new stormwater facilities O&M responsibilities to be clearly identified. Maintenance in accordance with maintenance standards established in the SWMMWW and Bremerton's Operation and Maintenance Manual is required, and system owners are compelled to keep their systems in good operating condition.

Review of these requirements will be completed in 2021 and updated as required to clarify the requirements and expectations.

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, are completed, and documented.

#### S5.C.7.c Maintenance of Stormwater Facilities Owned or Operated by the Permittee

All city owned and operated stormwater treatment and flow control BMPs/facilities are inspected and appropriately maintained on an annual basis. Stormwater ponds are



inspected after major storms to ensure they are fully functional and operating as designed. Repairs and appropriate maintenance action are completed in accordance with maintenance standards established above, based on the results of the inspections.

#### S5.C.7.c.i Annual Inspection Program

*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.*

An annual inspection program ensures these sites are operating and good working condition. Maintenance of all municipally owned or operated stormwater treatment and flow control BMPs/facilities is completed in accordance with the adopted maintenance standards.

#### S5.C.7.c.ii Spot Check Inspection After Major Storm Events

Bremerton routinely checks permanent stormwater treatment and flow control BMPs/facilities during and after large storms to verify facility function and integrity. Maintenance and/or repairs are completed as needed to maintain facility operation and functionality.

#### S5.C.7.c.iii Inspection of catch basins and inlets owned by the Permittee

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

All catch basins, inlets, treatment facilities, and ponds, owned or operated by Bremerton, are cleaned annually. Decant water is disposed of in accordance with Appendix 6 – Street Waste Disposal at the Oyster Bay Public Works complex. Sediment, in decant water, settles and the water is discharged to the sanitary sewer system and treated at the wastewater treatment plant. All catch basin sediment, debris and street sweeping spoils are disposed of in accordance with Department of Ecology's Dangerous Waste Regulations (Chapter 173-303-016 WAC). The decant facility is operated under a permit and annually inspected by the Kitsap Public Health District.

#### S5.C.7.c.iv Compliance with inspection requirements criteria

*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.*

Inspection of the MS4 is completed during maintenance and recorded in the City's GIS map throughout the year. Deficiencies are identified and scheduled for repair based on

significance of the issue. A GIS based map for all city stormwater assets is available to staff on desktop computers, laptops, smart phones, and handheld tablets. In 2021, maintenance, inspections, correspondence documentation, and tracking will continue to be incorporated into the GIS system databases. Facilities Division and Parks Department stormwater assets are inspected and documented on paper files and retained by those offices. In 2021 this documentation will be moved to a cloud-based system to centralize data archiving. Private stormwater systems are inspected by the Public Works Compliance Division. All correspondence and reports from these private inspections are kept in both paper and electronic files attached to a GIS layer. These are also being moved to the cloud-based system.

#### S5.C.7.d Implement practices to reduce stormwater impacts from City properties

*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:*

- *Pipe cleaning*
- *Cleaning of culverts that convey stormwater in ditch systems*
- *Ditch maintenance*
- *Street cleaning*
- *Road repair and resurfacing, including pavement grinding*
- *Snow and ice control*
- *Utility installation*
- *Pavement striping maintenance*
- *Maintaining roadside areas, including vegetation management*
- *Dust control*
- *Application of fertilizers, pesticides, and herbicides according to the instructions for their use, including reducing nutrients and pesticides using alternatives that minimize environmental impacts*
- *Sediment and erosion control*
- *Landscape maintenance and vegetation disposal*
- *Trash and pet waste management*
- *Building exterior cleaning and maintenance*

Bremerton is a member of the Regional Road Maintenance Endangered Species Act (RRMP ESA) Program, since December 2001, and has implemented the program elements in its activities. The program includes all the activities listed under section S5.C.7.d and has a training element. A copy of the Regional Road Maintenance ESA program guidelines can be found at:

<https://kingcounty.gov/depts/local-services/roads/endangered-species-act-reports.aspx>

Bremerton has policies and procedures in place for building and grounds maintenance, including parks, trash management, and sediment control. Only qualified personnel, in compliance with policies, use fertilizers, pesticides, and herbicides. Good housekeeping practices are in place at all City owned properties and facilities. Municipal operations and maintenance staff are trained to use pollution prevention techniques and practices to help reduce and prevent pollution of stormwater runoff. All city streets are swept at least twice per year with major roadways being swept twice per week. Sweeping spoils are disposed of in accordance with Department of Ecology's Dangerous Waste Regulations (Chapter 173-303-016 WAC). During the fall months and into the winter, sweepers are actively collecting leaves and debris 16 hours a day, five days per week or more if necessary. This keeps catch basins clear for stormwater and protects water quality. In 2021, these programs and training will be reviewed to determine areas where improvements can be made and to refresh staff knowledge.

Bremerton implemented a small sweeper operation program in August of 2019. The new sweeper is used on sidewalks, bridge walk paths, public commons areas, and places the larger street sweepers cannot access. This program will further reduce pollutants coming from areas currently cleaned by hand. This will enhance the sweeping program and provide more efficiency to the program and expand environmental benefits.

Program review will be completed in 2021 to ensure it is effectively used to protect, preserve, and improve water quality and the environment.

#### S5.C.7.e      Implement an ongoing training program for employees

*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.*

Bremerton has a comprehensive training program that works to prevent pollution at the source. A well-trained workforce reduces or prevents pollution of stormwater runoff and degradation of water quality from City operations and maintenance activities. Staff are provided with training opportunities to obtain certifications for CESCL, LID planning and construction. There is also internal training for operations and maintenance staff for basic stormwater pollution prevention, IDDE, spill response, and good housekeeping measures. Several resources have been made available to City staff for training that include intranet video training for: IDDE; construction site stormwater control and BMPs; stormwater pollution prevention; and on-demand webinars covering many stormwater

subjects. All Bremerton inspectors are CESCL certified as well as Public Works supervisors and specific Parks Department staff. A new training system is being implemented in early 2021 to further improve staff education opportunities and tracking. Training modules will be assigned to each city staff, that includes a video and test, based on their job function to expand staff knowledge on the importance of managing sources of stormwater pollution.

**S5.C.7.f      Implement a SWPPP for all equipment maintenance or storage yards**

*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.*

SWPPPs have been developed and implemented for all maintenance, and material storage facilities. City owned facilities and Parks also have SWPPPs to define requirements for good housekeeping measures and inspections. Stormwater system inspection and maintenance are included in SWPPPs activities which are documented by assigned staff. The Oyster Bay Public Works Facility SWPPP was updated in 2016. All SWPPPs will be reviewed and updated in 2021.

**S5.C.7.g      Record of inspections and maintenance requirements**

*Maintain records of the activities conducted to meet the requirements of this section.*

Facilities, Parks, Compliance, and Stormwater divisions complete inspections and document the results for their locations. Work orders are submitted to the Stormwater Maintenance group by Facilities and Parks staff for assistance beyond their abilities. Tracking will be migrated to the cloud-based system in 2021 to improve our program.

**Source Control Program for Existing Development S5.C.8**

A source control program is a new requirement of the Permit, effective August 2019. Historically Kitsap Public Health provided a source control program, but the new program is an expanded version that covers additional stormwater concerns.

**S5.C.8.a      Implement a Program to Prevent and Reduce Pollutants in Runoff from Areas That Discharge to the MS4**

Program development began in 2020 and will continue in 2021 to include inspections, supporting codes, application of operational source control and structural source control BMPs and/or treatment BMPs/facilities, or both, to pollution generating sources associated with existing land uses and activities.

The program will be developed by the end of 2022 and fully implemented on January 1, 2023.

#### S5.C.8.b Minimum Performance Measures of Source Control Program

The source control program will include municipal code updates through ordinances, and other enforceable documents that require the application of source control BMPs for pollutant generating sources associated with existing land uses and activities identified in Appendix 8 of the Permit. 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.

No later than August 1, 2022, Bremerton 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 of the 2019 Municipal Phase II Stormwater Permit).

(b) Other pollutant generating sources, based on complaint response, such as: home-based businesses and multi-family sites.

No later than January 1, 2023 an inspection program will be implemented for sites identified pursuant to Appendix 8 of the Permit.

#### S5.C.8.b.i Source Control BMPs

No later than August 1, 2022, Bremerton shall adopt and make effective 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 NPDES permit Appendix 8 to identify pollutant generating sources).

#### S5.C.8.b.ii Potential Pollutants to MS4

No later than August 1, 2022, Bremerton 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.

S5.C.8.b.iii Inspection Program for Potentially Polluting Sites

No later than January 1, 2023, Bremerton shall implement an inspection program for sites identified pursuant to S5.C.8.b.ii of the Permit.

S5.C.8.b.iv Progressive Enforcement Policy for Non-Compliance with Stormwater Policy

No later than January 1, 2023, Bremerton shall implement a progressive enforcement policy that requires sites to comply with stormwater requirements within a reasonable time period.

S5.C.8.b.v Source Control Program Staff Training

*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.*

Staff training for the new source control program will be provided by Ecology through a series of workshops and if still available, a mutual aid agreement where Ecology Staff assist with inspections to help begin the program. More information will be available as the program and resources are developed.

---

## Activities Planned for 2021

### Stormwater Comprehensive Plan Update

Bremerton will complete the update of its Stormwater Comprehensive Plan in 2021. The plan includes:

- Updated 6 & 20 year capital improvement plan with treatment retrofit opportunities,
- Inventory of surface waters and known water quality problems,
- Inventory of salmon migration and habitat barriers within the city limits,
- Gap analysis of the stormwater program and NPDES Stormwater Permit,
- Stormwater Permit compliance program elements,
- Overall review of Bremerton's stormwater program,
- TMDL activities as required by the Sinclair Dyes Inlets Fecal Coliform.

### Public Education and Outreach

The public education and outreach program is the cornerstone to gaining support and helps to develop a foundation for the stormwater program. Pollution prevention education identifies activities and actions that have a negative impact on our environment and local waters. Through education, we can provide safe and effective methods to accomplish activities such as landscaping, disposal of wastes, pet waste management, car washing, etc. that minimize impacts on our environment. Changing behaviors that impact our environment and local waters is how the program will be successful in achieving its goals. To this end, Bremerton is a partner in the West Sound Stormwater Outreach Group (WSSOG), a regional organization of Kitsap County and local cities. Consistent messages and campaigns are developed and promoted region-wide to support local and national stormwater program goals. WSSOG education efforts are evaluated by professional staff and consultants based on surveys and behavior change results.

As part of the outreach and education effort, Bremerton installed pet waste bag dispensers at more than 50 locations and will continue to provide bags and garbage service to the locations in 2021. Additional dispensers will be installed as requested by citizens through the WSSOG ILA. This is a very successful program which results in tons of pet waste being collected and disposed of properly.

### Public Involvement

Bremerton provides opportunities for the public to participate in SWMP decision-making and responds to questions and concerns when presented. The SWMP is posted on the City's website along with the annual report for the previous calendar year.

The Stormwater Comprehensive Plan Update started in 2016 with expected completion in 2021. Public input was used to inform the plan development, identify concerns, define areas where issues may exist, and allow the plan to address these issues.

### Illicit Discharge Detection and Elimination (IDDE)

The enforceable mechanism, Bremerton Municipal Code, prohibits illicit discharges and other activities which can degrade our local waters and stormwater system infrastructure. Staff are trained to recognize illicit discharges, how to respond, control, and eliminate these from the stormwater systems. Signs were installed on the street sweepers with the spill hotline and more signs will be installed as opportunities are identified.

The City will continue to promote the “Spills Happen, Help Us Find Them” message and customer response hotline in 2021. Stormwater system, other utility, land use, and transportation GIS maps are accessible to Public Works staff via tablets. Direct and portable access to the City maps support quick response to spills or accidents when needed. These tools will continue to be developed and distributed for staff use.

IDDE refresher training will be provided to staff whose job is to identify illicit discharges, track and correct these problems. The documentation system for all customer complaints and IDDE issues is working well so incidents can be recalled as needed. Changes in the new Permit required the development of a new template and recording system which was implemented in 2019.

### Control Runoff from New Development, Redevelopment & Construction Sites

Development Engineering and Community Development enforce municipal codes that define construction and post-construction runoff control measures to prevent contaminated runoff.

Development activities such as plats, short plats, new site development and redevelopment that trigger thresholds, are required to provide stormwater control measures, install/use BMPs, use LID techniques and practices to meet Permit requirements. Trained staff ensure that plan submittals identify the use of appropriate measures to meet water quality and sediment standards by implementing controls and BMPs to prevent sediment laden runoff from entering the stormwater system.

Active construction sites are inspected once per week (at minimum), during and after large rain events or as needed to enforce compliance with the approved Temporary Erosion Sediment Control (TESC) plan. Exceedance of water quality or sediment standards requires modification of BMPs through the adaptive management process or the project will be stopped by notice from the City. Projects that hold a Construction Stormwater General Permit, issued by Ecology, will be checked for appropriate installation and maintenance of BMPs, and good housekeeping practices. TESC inspections that identify BMP deficiencies will be provided to the site developer's CESCL or site manager to be corrected. If they are unresponsive, the city will notify Ecology of the issue/s through the Environmental Report Tracking System (ERTS). Ecology inspectors will respond to the report and work with the developer to correct these issues, with Bremerton's support until the issue is resolved. Bremerton strives to



work with developers in an effort to meet all permit requirements using the most cost-effective approaches.

Good housekeeping practices are enforced for construction sites and all locations in Bremerton through inspections and code enforcement. Ecology's SWMMWW was adopted in BMC 15.04, with the most recent version being issued in 2019, as the standard for temporary erosion and sediment control BMPs. Division 2 of Bremerton's Engineering Design and Construction Standards were updated to reflect these requirements and provides a good tool for developers. Additional tools will be developed in 2021 to provide guidance for developers, and staff who are involved with stormwater pollution prevention and general construction. Refresher training and program review will be completed in 2021.

### Municipal Pollution Prevention, Operation, and Maintenance

Three divisions are responsible for stormwater system maintenance and operation: Public Works Stormwater (PWS), Facilities, and Parks Department. PWS maintains all stormwater infrastructure in the right-of-way and provides services for Facilities and Parks when requested through work orders. Facilities inspect and maintain all city owned properties with the exception rights-of-way, and Park's facilities. Park's inspects and maintains their stormwater systems. When maintenance is needed that requires vacuum truck, jetting, or repairs that these divisions can't complete, a work order request is submitted to PWS for the necessary action.

Facilities and Parks have their own facility SWPPPs. These include the following:

- Site map of the stormwater system, with spill kit locations, inventory of stormwater facilities and maintenance requirements,
- Documents to track inspections and maintenance activities,
- Spill control correction and countermeasures (SCCC) plan,
- Good housekeeping measures.

Bremerton operates two jet vacuum trucks and two sweepers throughout the year to maintain the stormwater system and protect runoff water quality. Collection of leaves, sediment, and trash from the road surface is an efficient method to protect water quality by reducing contaminants at the source.

PWS crew also maintain the sanitary sewer system so their time is split between the two systems. Maintenance is completed in cycles and as needed to keep the system operating. All city owned catch basins, ditches, and treatment facilities within the right-of-way are cleaned by fall of the year.

City staff are trained using on-demand videos posted to the City's intranet, conference sessions, at staff meetings, or one on one. Topics include good housekeeping practices, recognizing illicit discharges, preventing runoff contamination from job sites, and how-to cleanup spills. Most of the supervisors and crew lead's for Streets, Parks, and Facilities are Certified Erosion and Sediment Control Leads (CESCLs). Development and Engineering staff are also certified CESCLs and trained as needed to perform their jobs.

2021 will be an active year with continued implementation of MS4 maintenance, annual inspections of stormwater treatment and flow control BMPs/facilities, spot checks, and implementation of SWPPPs for municipal properties, and facilities. Staff training will focus on changes in the Permit requirements, associated municipal code updates, proprietary treatment system maintenance, and LID requirements.

**Compliance with Total Maximum Daily Load (TMDL) Requirements**

Prioritized system maintenance and inspections of private stormwater facilities for systems discharging into Oyster and Ostrich Bays will be performed in 2021. Pet waste bag dispensers and trash cans have been installed throughout the City at sensitive locations for a total of 52 City-owned stations and approximately 18 additional units that are maintained by private citizens. Additional dispensers will be installed this year in ROW and city-owned properties as needed.

**City of Bremerton TMDL Requirements and Actions in 2021**

<b>Western Washington Phase II Municipal Stormwater Permit Appendix 2</b>	
<b>Total Maximum Daily Load (TMDL) Requirements</b>	
<b>Name of TMDL</b>	<b>Sinclair and Dyes Inlets Fecal Coliform Bacteria Total Maximum Daily Load</b>
<b>Document(s) for TMDL</b>	<i>Sinclair and Dyes Inlets Fecal Coliform Bacteria Total Maximum Daily Load (TMDL) Water Quality Implementation Plan, In Draft, Ecology Publication No. 11-10-051.</i> <a href="https://fortress.wa.gov/ecy/publications/publications/1110051.pdf">https://fortress.wa.gov/ecy/publications/publications/1110051.pdf</a>
<b>Location of Original 303(d) Listings</b>	Dyes Inlet & Port Washington Narrows (WA-15-0020)  Gorst Creek (WA-15-4000)  Blackjack Creek (WA-15-4200)  Annapolis Creek (WA-15-4400)  Beaver Creek (WA-15-4900)  Clear Creek (WA-15-5000)  Barker Creek (WA-15-5100)  Sinclair Inlet (WA-15-0040)
<b>Area Where TMDL Requirements Apply</b>	These requirements apply to areas served by MS4s listed below within the TMDL coverage area.
<b>Parameter(s)</b>	Fecal coliform bacteria

<b>EPA Approval Date</b>	July 5, 2012
<b>MS4 Permittee:</b>	Phase II Permit: City of Bainbridge Island, WAR04-5503; City of Bremerton, WAR04-5507; City of Port Orchard, WAR04-5536; Kitsap County, WAR04-5546

**City of Bremerton** (requirement language from the NPDES Permit)

- Designate any previously unscreened areas discharging via the MS4 to the TMDL area as the highest priority for illicit discharge detection and elimination routine field screening. Screen for bacteria sources when conducting illicit discharge detection and elimination field screening activities in these areas. Implement the schedules and activities identified in S5.C.5 of the Western Washington Phase II Permit for response to any illicit discharges found.
- Install and maintain pet waste education and collection stations at municipal parks and other Permittee owned and operated lands adjacent to stream and marine shorelines. Focus on locations where people commonly walk their dogs.

**Water Quality Improvement Projects**

In 2017, the Lebo Blvd redevelopment project installed 10 Modular Wetlands Systems that treat runoff from 7.5 acres of road surface a pollutant generating impervious surface (PGIS).

In 2019, the Marine Drive and Kitsap Way Stormwater Treatment Retrofit construction project installed four large Modular Wetlands Treatment Systems, and 250' of infiltration gallery. This project treats a significant portion of runoff entering Oyster Bay and has improved water quality.

In 2021, the Ostrich Bay Creek Stormwater Treatment Retrofit project will install 14 treatment systems and two bioretention swales. The treatment retrofit projects help address TMDL goals in the Oyster and Ostrich Bays and the Port Washington Narrows. The selected treatment systems provide basic, enhanced, and phosphorus treatment for stormwater prior to discharging into Oyster Bay or Ostrich Creek.

A wastewater improvement project designed that will install grinder pumps to pump wastewater upland to a gravity sewer system and eliminate the beach main connection, thereby eliminating potential sewer leaks into Oyster Bay. Construction is expected in the next couple of years.

**IDDE Actions:**

Areas discharging, via MS4, to Phinney and Ostrich Bay Creeks, Oyster and Ostrich Bays, and to shorelines along Port Washington Narrows are the highest priority areas

for IDDE routine field screening.

Bremerton has had an ongoing dry weather outfall reconnaissance inventory program since 1997. Several cross connections were discovered and corrected prior to 1999. All outfalls discharging to marine and fresh waters, from 8" and up in size, are inventoried, inspected, and tested for contaminants. Outfalls will again be inspected and screened for illicit connections during dry weather in 2021. If an illicit discharge is found, Bremerton will follow the IDDE program protocols to locate the source of the contaminant and correct the problem.

Kitsap Public Health works with Bremerton Public Works (BPW) through their Pollution Identification and Correction program (PIC). When they locate a site with elevated fecal coliform bacteria they notify BPW with site details and sample results. The IDDE program then works to identify the source and correct the problem.

#### Maintenance Actions:

City owned stormwater systems that drain to Phinney and Ostrich Bay Creeks, Oyster Bay and to shorelines along Port Washington Narrows are cleaned annually. Privately owned systems are required to be maintained annually based on inspection results. Maintenance standards are enforced for catch basins and facilities to reduce the production of fecal coliform and protect water quality. Ecology's SWMMWW, July 2019, and the Bremerton Operation and maintenance Manual are the reference manuals that set maintenance standards and frequency.

#### Pet waste

Pet waste bag dispensers have been installed throughout Bremerton in Parks and areas where pets are walked. The majority are in parks and areas along water ways. There are currently 52 dispensers at high priority locations throughout Bremerton. The City provides over 170,000 bags per year, which has been steadily increasing since the first dispenser was installed several years ago. Trash receptacles are located close to the bag dispensers to provide a safe disposal place for the pet waste.

#### Wastewater

Bremerton is coordinating efforts with Kitsap Public Health District and Kitsap County Public Works to review areas where sanitary sewer can be extended to provide service for properties with failing septic systems. This will help reduce fecal coliform contamination in these areas.

#### Reporting and record keeping

Records related to the permit will be kept for at least five years as required by the Permit.

Capital Improvement Plan – 2021 Projects

Project Name	Project Stage	Summary Details
Ostrich Creek Culvert Improvements (PWTF)	Construction on Kitsap Way	New stormwater infrastructure and fish barrier removal
Ostrich Bay Creek Stormwater Treatment Retrofit construction	Final design approval from Ecology and construction	Design completed 3/2021, construction summer of 2021
Pine Basin Watershed Storm Sewer Improvements (PWTF)	PWTF Contract, design Robin, Eagle and Dibb flooding mitigation, Pine Rd outfall replacement,	Includes Pine Rd Basin outfall, new SW system on Robin to from Dibb to Sheridan Rd, and Stephenson Creek inlet structure
Kitsap Lake Francis Street Stormwater Outfall	Design	New stormwater outfall and phosphorus treatment
Kitsap Lake Phosphorus Treatment and aquatic vegetation harvesting	Full lake treatment	Treatment of phosphorus to reduce algae blooms
Kitsap Lake Watershed Plan	Complete planning effort	Finalize plan, implementation has started
Kitsap Lake Stormwater Treatment	Design	Ecology grant to support design at 4 locations
Kitsap Lake Park SW Treatment	Design and construction	In design phase with construction this summer
Northlake Way culvert replacement with 25' wide 3 side culvert to eliminate fish barrier	Preliminary Design	Preliminary design completed, application for complete design in fall 2021
Schley Canyon Culvert	CIPP repair with Anderson Creek Dam removal for mitigation	Removal of fish barriers in Anderson Creek
East Park Stormwater Outfall	Maintenance	Repair/replace gravel and materials to stabilize outfall

Gorst Creek fish barrier	Design	Small area restoration for temporary barrier correction
Rain Garden Program	City-wide	Education and partnership to infiltrate runoff
E 11 <sup>th</sup> and Perry Ave redevelopment with stormwater treatment	Final design	Construction in 2022 adds treatment at 2 locations
City-wide Watershed Scale Planning	Ecology grant in October	Permit requirement with assistance from a grant

### 2019-24 Stormwater Permit

The NPDES Municipal Phase II Stormwater Permit became effective August 1, 2019 for the 2019-2024 period that includes a number of new additional requirements. This section summarizes these new requirements and potential operational and financial impacts.

### Comprehensive Stormwater Planning

This new section requires permittees to apply a watershed-scale approach to stormwater management. This reflects two key Ecology findings (2018a):

- *Water quality and aquatic habitat in western Washington State cannot be maintained without considering land use and how the landscape is developed, and*
- *Addressing stormwater impacts from new development and redevelopment at the site and subdivision scale will not adequately address legacy impacts from previous development patterns and practices, nor will it serve to protect water quality.*

*To address these findings, stormwater programs must include planning and policies that address receiving water quality needs and TMDLs. Programs must also include development of policy and regulations that address treatment retrofit provisions (Ecology 2018a) for existing development.*

### Coordination with Long-Range Plans

This permit condition requires the analysis and reporting of how stormwater infrastructure and receiving water needs are informing planning update processes and influencing land use policies and implementation strategies. This section does not intend to create a parallel planning process to ongoing long-range planning or

Comprehensive Plan updates; rather, the reporting will describe how planning processes consider, and evaluate stormwater and water quality.

This must include:

- How, or if, stormwater-related water quality and watershed protection are being addressed in revisions to the City's Comprehensive Plan, and
- How water quality and watershed protection are being addressed in revisions to other locally initiated, state-mandated long-range land use, transportation plans, or other plans used to prepare and accommodate population needs.

The initial policy and long-range plan assessment was completed in 2020. Coordination between PWU and DCD through monthly stormwater program alignment meetings will help facilitate this permit requirement.

#### Stormwater Management Action Planning

The new permit requires Permittees to develop a prioritization process and criteria to select projects to address impacts caused by areas of existing development. This process must include the following elements:

- An inventory of local receiving waters and summary of available information about the contributing watershed areas.
- Prioritization of basins to identify the contributing watershed areas where implementation of stormwater retrofit projects will provide the greatest benefit to the receiving waters.
- Development of a Stormwater Management Action Plan (SMAP) for at least one high priority area that identifies tailored stormwater management actions, including: stormwater facility retrofits (new facilities or upgrades to existing facilities), a proposed implementation schedule, and budget sources. The plan must identify (1) short-term actions (i.e., actions to be accomplished within six years), (2) long-term actions (i.e., actions to be accomplished within seven to 20 years), and (3) a process to adaptively manage the plan.

The initial inventory is due in March 2022, the prioritized list of receiving waters is due June 2022, with a SMAP developed by March 2023. (NPDES Permit Section S5.C.1.d)

#### Public Education and Outreach

New permit requirements related to public education and outreach includes the following:

- Evaluation of ongoing efforts and how successful the program is at reaching target audiences.
- Documentation of lessons learned, and recommendations for next steps with regional education and outreach program.
- Design the next iteration of the program using community-based social marketing methods to develop a strategy and schedule.

The City's permit compliance responsibilities for these elements will be addressed through existing regional public education efforts that are led by West Sound Stormwater Outreach Group for Kitsap County. The initial program assessment was completed in 2020.

#### System Mapping and Documentation

The new permit requires Permittees to map the system in greater detail in areas with land uses that involve storage, transfer, or use of materials that present significant risk to water quality and aquatic resources. Specific requirements include:

- Identifying the size and material of all outfalls,
- Mapping of all known connections from the City system to a privately-owned stormwater system.

The initial program assessment was due as part of the 2020 Annual Report and submitted to Ecology. Implementation of this requirement is expected to be combined with source control mapping as described in the section below.

#### Operation and Maintenance

The new permit requires the City to update maintenance standards to be consistent with those in the 2019 Ecology Manual. The City's existing maintenance standards were updated in 2020; however, maintenance, monitoring, and documentation systems need to be improved to demonstrate compliance with this expanded permit condition. This will partially be complied with by updating the inspection documentation system to the cloud-based system we are in the process of implementing. The proposed Asset Management system is a measure to help meet this permit requirement. Asset system development and continued maintenance is expected to require 0.5 FTE to adequately comply with the Permit.

#### Source Control Program for Existing Development

The Source Control Program for existing and future development is intended to be a proactive, preventative, inspection-based program that is focused on addressing pollution from existing land use and activities that have the potential to release pollutants. This program will rely on the City to inspect businesses and properties, and if



necessary, require operational and/or structural source control BMPs to prevent pollution from entering the City’s stormwater system. The SW permit requires the following activities:

- Adopt ordinances and/or other enforceable documents requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities by August 1, 2022.
- Develop an inventory of potential pollutant generating sites that identifies public and privately owned commercial and industrial properties by August 1, 2022. The inventory must be created once during the permit cycle and be updated once every five years.
- Conduct business specific education and outreach to inventoried properties.
- Conduct annual inspections equal to 20% of the businesses or properties on the inventory list.
- Establish a complaint-based response program.
- Establish an enforcement program for identified sites including new ordinances. Note that the compliance strategy would include technical assistance and education and outreach as the first approach to gain compliance. Enforcement actions would be implemented only when other approaches are found to be ineffective.
- No later than January 1, 2023, implement an inspection program for identified sites pursuant to S5.C.8b.ii of the SW Permit.

A wide variety of businesses are subject to this requirement including transportation, health care, building materials, and equipment storage facilities. Within the City of Bremerton, there are more than 860 commercial properties with 160 “priority 1” moderate risk waste generators (includes schools, businesses, etc.) that will require inventory and inspection. There are over 700 “priority 2” (multi-family, restaurants, etc.) commercial properties that will need site visits, education, outreach. The latter group have the possibility of being upgraded to a “priority 1” property. Overall, the scope of this permit requirement is expected to require 0.5 FTE to start, and 1 FTE at full implementation to maintain the program in compliance with the SW Permit schedule.

Any questions, comments, or concerns please contact the Stormwater Permit Coordinator, Chance Berthiaume, at [chance.berthiaume@ci.bremerton.wa.us](mailto:chance.berthiaume@ci.bremerton.wa.us) or at (360) 473-5929