Stormwater Management Program (SWMP) Plan 2020

Permittee Coverage Number: WAR04-5554

City of Oak Harbor * 865 SE Barrington Drive * Oak Harbor, WA 98277

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1 INTRODUCTION

This document has been prepared in accordance with the *Western Washington Phase II Municipal Stormwater Permit* (the Permit). The Permit was issued by the Department of Ecology (Ecology) to municipalities with populations of less than 100,000 as operators of small and medium municipal separate storm sewer systems (MS4s). More than 80 medium and small cities, including the City of Oak Harbor (Oak Harbor) and urban portions of five counties in western Washington, must comply with the provisions of the Permit. This five-year Permit was issued by Ecology on July 1, 2019 and is effective from August 1, 2019 through July 31, 2024.

The Permit authorizes the discharge of stormwater runoff from MS4s into the state's surface waters (i.e., streams, rivers, lakes, sounds, wetlands, etc.) and groundwater as long as municipalities implement Permit-specified actions and activities known as Best Management Practices (BMPs) to protect these receiving waters. Permit requirements are phased in over the 5-year Permit term per a specified schedule. Some of the required BMPs are carry-overs from the previous Permit while other requirements are new. Table 1 presents the overall implementation schedule of the current Permit. Additional schedule details can be found in the full text of the Permit found on Ecology's website at:

http://www.ecy.wa.gov/programs/wq/stormwater/municipal/phaseIIww/5YR/WWAPhaseIIPermit2013.pdf

1.1 The Stormwater Management Program Plan

Section S5.A of the Permit requires each Permittee to develop and implement a Stormwater Management Program (SWMP). Each Permittee must also annually prepare written documentation of the SWMP, called the SWMP Plan (Plan). This Plan is intended to be a forward-looking document describing the set of actions and activities (BMPs) the Permittee intends to complete in the upcoming calendar year to comply with the Permit.

This SWMP Plan is organized per S5.C of the Permit and will be updated at least annually for submittal with Oak Harbor Annual Reports to Ecology.

The BMPs are grouped under the following Program components:

- Stormwater Planning (S5.C.1.)
- Public Education and Outreach (S5.C.2.)
- Public Involvement and Participation (S5.C.3.)
- MS4 Mapping and Documentation
- Illicit Discharge Detection and Elimination (IDDE)
- Controlling Runoff from New Development, Redevelopment, and Construction Sites
- Operations and Maintenance (O&M)
- Source Control Program for Existing Development

In addition, the Permit requires reporting and, if applicable, implementation of water-body specific cleanup plans developed by Ecology. To date, Ecology has not developed such plans for Oak Harbor's water bodies.

This SWMP Plan covers the City of Oak Harbor's ongoing activities to comply with the Phase II Permit and those planned for next year.

1.2 Stormwater Management in Oak Harbor

Oak Harbor is the largest incorporated City on Whidbey Island. Three settlers, Martin Taftson, C.W. Sumner and Ulrich Freund founded Oak Harbor in the early 1850s when it was mainly a fishing town. Since then, the City's growth coincided with two major events: the building of Deception Pass Bridge on July 31, 1935, and the completion of Naval Air Station Whidbey Island in September 1942. It now has an estimated 2017 population of 23,187 and covers approximately 9.4 square miles of land area. The predominant land use within the City is residential, with smaller pockets of commercial and industrial. The majority of the stormwater runoff from Oak Harbor eventually drains into Oak Harbor Bay, which enters Saratoga Passage and Skagit Bay.

Oak Harbor is committed to meeting the compliance requirements and deadlines of the Permit. The stormwater management program in Oak Harbor is led by the City's Operations Manager in the Public Works Department, Storm Drain/Wastewater Collections Division, with assistance from a team of Storm Drain/Wastewater Collections Specialists.

A comprehensive storm drainage plan was adopted by the Mayor and City Council in 2007. The plan contains background information, water quality assessment, and alternative solutions for improving Oak Harbor's stormwater runoff quality. The update to this plan (March 2020) was prepared by the City's consultant, Gray and Osborne Engineering and will be presented to City Council on March 17, 2020 for adoption by resolution. This updated plan was presented to Oak Harbor's Planning Commission and City Council twice, starting in late Fall of 2019 and continuing through Winter of 2020. This updated plan not only examines conveyance/flooding issues, but also considers NPDES II permit requirements, including programming studies of 3 basins or sub-basins for consideration of the forthcoming 2024 NPDES II permit basin retrofit requirement.

In 2011, the City updated its subdivision code to further allow and encourage low impact development (LID). This was following a study to evaluate options to further allow LID that was funded in part by the Puget Sound Partnership. In 2016, the City updated its Municipal Code to incorporate LID as the primary methodology of stormwater addressal, as well as adopted the 2012/14 Stormwater Management Manual for Western Washington.

Oak Harbor continues to track costs associated with the program's actions and activities as required by both the current and previous Permit.

1.3 Document Organization

The remaining sections of this document have been organized to follow the sequence of the Permit requirements S5.C.1 through S5.C.8, as well as the new requirements for S8, monitoring and assessment. Permit requirements, current/ongoing activities, and planned activities for each of the required elements are presented.

2 STORMWATER MANAGEMENT PROGRAM PLAN COMPONENTS

This section discusses the SWMP Plan components found in S5.C of the Western Washington Phase II Municipal Stormwater Permit.

2.1 Stormwater Planning (S5.C.1.)

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

Section S5.C.1 Stormwater Planning includes new requirements that apply a more "holistic" view to municipal stormwater management. This section requires a planning approach that emphasizes protection and improvement in the receiving water quality and beneficial uses under anticipated future developed conditions.

To comply with these new permit requirements, not later than August 1, 2020, the City will convene an interdisciplinary team which will inform and assist in the development, progress and influence of this program. At a minimum, the team will include representatives from Planning, Engineering, Legal, Finance and City Administration.

The team will be responsible for the following minimum performance measures:

- Coordination with long-range plan updates by describing how stormwater management needs and protection and/or improvement of the health of the receiving waters are (or are not) informing the planning update processes and influencing policies and implementation strategies.
- Annually assessing and documenting any newly identified administrative or regulatory barriers to implementation of LID principles or BMPs.
- Not later than March 31, 2022, preparation of a watershed inventory which includes a description of the receiving waters and contributing areas.
- Not later than June 30, 2022, preparation of a prioritized and ranked list of receiving waters based on which will receive the most benefit from stormwater facility retrofits, tailored implementation of stormwater management action plans, and other land/development management actions.
- Not later than March 31, 2023, development of a stormwater management action plan for at least one high priority catchment area including:
  - Description of stormwater facility retrofits;
  - Land management and development strategies and/or actions identified for water quality management;
  - Targeted, enhanced, or customized implementation of stormwater management actions;
  - Identification of changes needed to local long-range plans to address stormwater management action planning;
  - Proposed implementation schedule and budget; and
  - Process and schedule to provide future assessment and feedback to improve the planning process and implementation of procedures or projects.

2.2 Public Education and Outreach (S5.C.2.)

The required elements for a Public Education and Outreach Program (Section S5.C.2 of the Permit) are summarized below, followed by a description of the ongoing and planned SWMP activities that meet these requirements.

2.2.1 Permit Requirements

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

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

Permittees may choose to meet these requirements individually or as a member of a regional group. The City of Oak Harbor is meeting these requirements individually.

The minimum performance measures are:

a. Each Permittee shall implement an education and outreach program for the area served by the MS4. The program design shall be based on local water quality information and target audience characteristics to identify high priority target audiences, subject areas, and/or BMPs. Based on the target audience's demographic, the Permittee shall consider delivering its selected messages in language(s) other than English, as appropriate to the target audience.

   i. **General Awareness.** To build general awareness, Permittees shall annually select at a minimum one target audience and one subject area from lists in the permit.
   ii. **Behavior Change.** To affect behavior change, Permittees shall select, at a minimum, one target audience and one BMP from lists in the permit.

<u>City's Approach to the General Awareness requirement</u>:

- The City provides ongoing General Awareness to the general public regarding Low impact development (LID) principles and LID BMPs, and general impacts of stormwater on surface waters, including impacts from impervious surfaces. Listed below the behavioral change section are activities (ongoing and planned for this year) that provide general awareness.
- In addition to educating the general public, the City will be providing CESCL training in May 2020 for new staff, local contractors, engineers, developers, and land use planners.

<u>City's approach to the Behavior Change</u>:

- Measure the understanding and adoption of the targeted behaviors for at least one target audience in at least one subject area. No later than July 1, 2020 Permittees shall conduct a new evaluation on the effectiveness of behavior change and direct education and outreach resources most effectively. Permittees may meet this requirement individually or as a member of a regional group. Oak Harbor will meet this requirement individually. In

accordance with S5.C.2.a.ii.(c)3, the City is electing to forgo this evaluation and change the target audience and measurement of behavioral change.

Oak Harbor will continue educating businesses on proper source control, housekeeping, and disposal of liquids and other wastes, however, the new measurement of behavioral change will be an audience specific source control educational effort (reference S5.C.8). It will have an emphasis on retrofitting of spill control separator retrofits (control hoods/tees) in private systems nearest the connection to the MS4. The target audience will be specific businesses that have higher potential to spill or dump waste into privately owned on-site catch basins. The program will educate business on the benefits of installing spill control separators in their catch basins and will build on the City's source control education effort that targets restaurants and other oil and grease producing businesses. Behavioral changes will be measured by tracking the installation of spill control separators as retrofits to existing systems. This program must be implemented by April 1, 2021.

Background: Staff have recognized spills in the past could have been contained on-site and prevented from entering the MS4 and downstream receiving waters had a spill control separator been present.

2.2.2 Ongoing Activities

The list of recurrent activities below provide education and general awareness to the general public and generally occur annually. Some may not occur in a specific year if the resources are not available or public requests for specific events do not occur.

Examples of General Recurrent Annual Activities

- **Environmental Car Wash Kits** – The City maintains four car wash kits and developed a packet of information, including diagrams on how to use the kits, and a list of biodegradable soaps and where they can be purchased. These information packets were distributed at the local high school. Athletic clubs and other clubs and organizations were informed about the availability of the car wash kits for fundraisers.
- **Car Wash Kit Video** – The City hired a video professional who made a short "how to set up a car wash kit" video that is linked to the City's website and is available on CD for groups that check out a car wash kit. In 2011, the City put the video on YouTube. We also have car wash kit check out forms on the website. The video is still on the City's website and is currently offered to new users of the car wash kits.
- **Restaurant Inspections** – Since the restaurant survey and study was completed, we continue to conduct site inspections and accompanied discussion, as well as distribute new posters of the BMPs and conduct PowerPoint training videos. We also have two car wash kits strictly for business owners to check out for cleaning their outside areas.
- **Spill Control Retrofitting –** City storm water inspector was successful in getting Applebee's and Safeway to install spill control hoods in catch basins to provide downstream protection. The City will continue to educate property owners as to the benefits of installing spill control hoods/tees.
- **Garbage Truck Signs –** Signs were made in 2009 "Only Rain Down the Storm Drain" and "Puget Sound Starts Here". The signs are displayed on our garbage trucks on a regular rotation, and we are still using these signs.

- **Stormwater Flow Control and Treatment Facility Maintenance Meetings** –The City holds educational meetings at private stormwater facilities where attendees are instructed how to maintain their specific facilities. These meetings may involve homeowners, property managers, and/or contractors.
- **Native Vegetation Restoration and Education –** The City has been promoting native vegetation re-establishment, with emphasis on Garry oaks and their companion native species. Garry oak is the City's namesake tree and habitat has dramatically decreased across western Washington due to farming, development, and conifer intrusion. Significant efforts have been made with many different activities generally involving education with a "hands on" component. Activities and educational information are posted on the City's website. This subject included the following activities:
  - The City established a 3.5 acre Garry oak grove, called the Centennial Grove, on City owned property with about 370 oak trees planted to date. This project included the public in the following activities: fundraising, sponsorship, planting acorns, growing seedlings, planting seedlings, planting saplings, placing weed fabric, mulching, weeding, building and installing hawk perches as well as an educational component regarding the benefits of native species vegetation restoration. People/groups involved included citizens and groups such as: Oak Harbor Garry Oak Society, Oak Harbor Garden Club, Scouts, Navy volunteers, High School National Honor Society students, High School Ecology Club members, High School Horticulture Class students and Elementary School students. This is an ongoing project that allows continuing opportunities for education and involvement.
  - The City of Oak Harbor earns Tree City USA recognition annually. In celebration of Arbor Day, the City does a tree planting activity which includes an educational component and generally involves some or all of the following: citizens, City employees, Oak Harbor Garry Oak Society members, Garden Club members, Navy volunteers. The selected tree species is usually Garry oak. This is an ongoing annual event.
  - City staff coordinated with State Parks staff to have their staff and Hillcrest Elementary staff and students plant Garry oak trees at Joseph Whidbey State Park. This activity occurs annually in September as "Green Apple Day of Service" and includes an educational component.
  - Staff educates a new class of Sound Water Stewards on Garry oak habitat (native vegetation) restoration annually (1.5 hour class).
  - Post Office Garry oak habitat native species garden. The City has worked with the local Post Office and the Oak Harbor Garry Oak Society to install and maintain an educational demonstration garden of Garry oak savannah species on City and Post Office owned land. The project is ongoing and species identification and education interpretive signs were installed in 2019.
  - City staff works with the Oak Harbor Garry Oak Society (OHGOS) to restore native vegetation in parks and other areas. The City provides education to members regarding benefits to stormwater runoff from native vegetation restoration. Efforts include planting wildflowers and shrubs, as well as oak trees at schools, City properties, and Navy Properties.
  - Smith Park Interpretive Signs. The City installed three interpretive panels at Smith Park that provide information regarding the native oaks and their ecosystem, including flora and fauna. The unveiling was December 6, 2017. These signs provide continuing education.

- **Special Events Letters** – Prior to downtown special events, the City has meetings and sends out illicit discharge prevention letters to our event organizers explaining the importance of teaching vendors about how to dispose of substances such as mop water, grease, paints, etc. In the past, these items would most likely end up in a catch basin.
- **OHHS Automotive Shop –** City staff provides stormwater pollution and downstream effect education videos to Oak Harbor High School Automotive Maintenance Program. This target audience was selected because many of these students are training to enter the profession of automobile repair and will be working with automotive fluids and automobile repair byproducts on a daily basis.
- **Big Rig Days** – City staff takes garbage trucks, sweepers, vactors, fire trucks and dump trucks to Hillcrest Elementary School each year. Our crews explain the purpose of the equipment and how we use them to clean up spills, maintain catch basins and clean City streets. During this event, we pass out papers using our catch basin stencils and the kids color them and come up with their own phrases about how to stop pollution. The City selects some of the students' artwork and create bookmarks and garbage truck signs. We also have a book made with the posters that the students created and give it to the school.
- **Power Point Presentations** - Created and Presented Multiple PowerPoint Presentations, including the following subjects:
  - Low Impact Development (Impervious Surface Reduction & LID BMPS)
  - Backyard Green Roof Construction
  - Restoring Oak Harbor's Garry oaks (Native Vegetation Preservation & Stormwater Effects)
  - The Water Cycle
  - Engineering Presentation to Youth
- **Displays and Workshops on LID and Stormwater**
  Videos
- **City Council Presentations –** Present to City Council regarding NPDES II and LID requirements and BMPs
- **Oak Harbor Public School District Science Fairs –** City staffs an educational booth with displays and educational materials regarding stormwater education, LID, and pollution prevention, including interactive stormwater runoff pollutant transport diorama (Enviro-Scape Non-Point Source Model) and green roof models. This is an ongoing activity.
- **Oak Harbor Public School District Science Technology Engineering & Math (STEM) Nights –** City staffs an educational booth with displays and educational materials regarding stormwater education, LID, and pollution prevention, including interactive stormwater runoff pollutant transport diorama (Enviro-Scape Non-Point Source Model) and green roof models. This is an ongoing activity.
- **Stormwater Awareness Month** – Oak Harbor declares September to be "Stormwater Awareness Month". Stickers are placed on Whidbey Coffee cups and handed out. The stickers display the image of a fish with the words: "Make A Wish-Save A Fish/Only Rain Down the Drain". The Oak Harbor Music Festival also displays the same message on their beer garden cups. The reader board in the City of Oak Harbor displays a message regarding Storm Water awareness month. This is an ongoing activity.
- **Storm Drain Stenciling –** The City has storm drain **s**tencils and paint for stenciling storm drain inlets. City staff works with volunteer groups to paint storm drains throughout the City. Staff has added new stencils that are more creative to continue interest. Since stenciling wears off, it is an ongoing activity.

- **Illicit Discharge Training -** Oak Harbor School District Bus Drivers.
- **Grease Information** – The City hand delivers grease information packets to the public. These packets include a brochure about pollution in Puget Sound, a tin can cover and scraper explaining the proper way to store grease.
- **Book Distribution to Elementary Schools** – *All the Way to the Ocean.*
- **Interpretive Signage –** Installed in various locations throughout parks and trails.

2.2.3 Planned Activities

In 2020, the City plans to continue the recurrent annual public education and outreach activities presented above. The list below will be the primary focus of activities for 2020, the above list of recurrent activities will generally occur as opportunity allows.

- **Storm Drain Stenciling**
- **Big Rig Days**
- **Stormwater Awareness Month**
- **Grease Information**
- **Storm Drain Model**
- **Native Vegetation Restoration and Education**
- **Sound Water Stewards**
- **CESCL Training –** The City will be providing Certified Erosion Control Training to local contractors and new City staff in May of 2020.
- **Illicit Discharge Training with Oak Harbor School District Bus Drivers** – In this training, City staff will meet with bus drivers and explain how the stormwater system works and the effects of not properly maintaining their filling station area, as well as how spills adversely affect the City's stormwater system.
- **Illicit Discharge Training with Oak Harbor School District Maintenance Staff** – Staff will explain how the stormwater system works and the effects of not properly maintaining their filling station area, as well as how spills adversely affect the City's stormwater system.
- **OHPS Classes –** Staff will arrange to have stormwater pollution and downstream effect education videos shown to Public School classes, including the Oak Harbor High School Automotive Maintenance and Culinary programs, and elementary schools.
- **Detention Pond Maintenance PowerPoint Presentation** – In early 2019, the City posted a detention pond maintenance PowerPoint presentation to the City's website and Facebook accounts. We will continue to run the videos in 2020.
- **Storm Water BMP Handouts** – The City will provide updated BMP educational pamphlets to contractors and property management companies.
- **Restaurant BMP Handouts –** New Posters distributed to the restaurants on Best Management Practices.
- **IDDE Video –** The City will show an educational video regarding IDDE and effects to Puget Sound. This video will be displayed on the City's website, Facebook and Channel 10.
- **Spill Control Retrofitting –** Staff has started an educational program aimed at audience specific businesses that have higher potential to spill or dump waste into private on-site catch basins. This program is intended to educate the businesses on the benefits of installing spill control separators (hoods/tees) in their catch basins. This program will be used to evaluate behavior changes per permit section S5.C.2.a.ii by tracking the installation of spill control separator retrofits. This program builds on the

City's existing source control education effort. The City has been in communication with the company that manufacturers the SNOUT spill control hood product and has signed up with them to do a trial retrofit in the public MS4 system.

2.3 Public Involvement and Participation (S5.C.3.)

The SWMP requirements for public involvement and participation (Section S5.C.3 of the Phase II Permit) are summarized below, followed by a description of the recent and planned SWMP activities.

2.3.1 Permit Requirements

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

The minimum performance measures are:

a. Permittees shall create opportunities for the public, including overburdened communities, to participate in the decision-making processes involving the development, implementation and update of the Permittee's SMAP and SWMP.

b. Each Permittee shall post on their website their SWMP Plan and the annual report required under S9.A no later than May 31 each year. All other submittals shall be available to the public upon request.

2.3.2 Recent and Ongoing Activities

The City held multiple meetings in 2012, 2013 and 2016, which were advertised in the Whidbey News-Times, the City's information TV Channel 10 and on the City's website, with the times and dates. The purpose of the meetings was to discuss the City's SWMP and to generate ideas from the public on the type of BMPs that would be most applicable for the area. However, there was no public attendance for the meetings. After no one showed for the 1st scheduled meeting in 2016, the City held a second meeting in 2016, and still not a single citizen attended. No meetings were held in 2017 or 2018 due to lack of public interest.

Public input to the SWMP has been through the ongoing public education/outreach efforts and involvement, which are two areas that the City has extensively pursued. At all public education efforts, staff has solicited feedback for incorporation into the upcoming SWMP. In addition, the City has added a page to their website soliciting public input via e-mail. The website link is https://www.oakharbor.org/news_site_view.cfm?id=3281 and the e-mail address is swmp@oakharbor.org.

The City updated the Municipal Code to implement LID as the first stormwater approach in development and redevelopment on December 31, 2016. To date, the City has not found need to update or revise the relevant code sections.

The City is also updating its utility rates, including stormwater rates. The rate study has been occurring through 2019 and is being finalized during the winter of 2020. Numerous public

City Council workshops and City Council meetings have been held on this subject. The City Council meetings are public hearings and allow for public comment.

2.3.3 Planned Activities

The City plans to adopt the March 2020 Stormwater Comprehensive Plan by City Council Resolution on March 17, 2020. Two public Planning Commission meetings were held as well as two televised City Council workshops. The Planning Commission meetings allowed for public comment; the workshops did not. The March 17, 2020 City Council meeting will hold a public hearing and allow for comment. In addition, the SEPA process was followed, which allowed for public comment.

As the SMAP is developed under S5.C.1, opportunities for public involvement and participation will be provided.

2.4 MS4 Mapping and Documentation (S5.C.4.)

The SWMP is required to include an ongoing program for mapping and documenting the MS4.

The minimum performance measures are:

a. Ongoing Mapping: Each Permittee shall maintain mapping data for the features listed below:

i. Known MS4 outfalls and known MS4 discharge points.
ii. Receiving waters, other than groundwater.
iii. Stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee.
iv. Geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters.
v. Tributary conveyances to all known outfalls and discharge points with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. The following features or attributes (or both) shall be mapped:
    a) Tributary conveyance type, material, and size where known.
    b) Associated drainage areas.
    c) Land use.
vi. Connections between the MS4 owned or operated by the Permittee and other municipalities or public entities.
vii. All connections to the MS4 authorized or allowed by the Permittee after February 16, 2007.

b. New Mapping: Each Permittee shall:

i. No later than January 1, 2020, begin to collect size and material for all known MS4 outfalls during normal course of business (e.g. during field screening, inspection, or maintenance) and update records.
ii. No later than August 1, 2023, complete mapping of all known connections from the MS4 to a privately-owned stormwater system.
    a) No later than August 1, 2021, the required format for mapping is electronic (e.g. Geographic Information System, CAD drawings, or other software that can map

and store points, lines, polygons, and associated attributes), with fully described mapping standards.

b) To the extent consistent with national security laws and directives, each Permittee shall make available to Ecology, upon request, available maps depicting the information required in S5.C.4.a through c, above.

c) Upon request, and to the extent appropriate, Permittees shall provide mapping information to federally recognized Indian Tribes, municipalities, and other Permittees. This Permit does not preclude Permittees from recovering reasonable costs associated with fulfilling mapping information requests by federally recognized Indian Tribes, municipalities, and other Permittees.

The City collected the outfall sizes and materials prior to January 1, 2020 and has been updating stormwater maps with this information. Much of the other above requirements are either accomplished or significantly accomplished. The City continually updates the mapping as new infrastructure is added.

2.5 Illicit Discharge Detection and Elimination (S5.C.5.)

The SWMP requirements for illicit discharge detection and elimination (IDDE) (Section S5.C.5 of the Phase II Permit) are summarized below, followed by a description of the ongoing and planned SWMP activities that meet these requirements.

2.5.1 Permit Requirements

Section S5.C.5. of the Phase II Permit states that the SWMP shall include an ongoing program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into the MS4. The minimum performance measures are:

a. The program shall include procedures for reporting and correcting or removing illicit connections, spills and other illicit discharges when they are suspected or identified. The program shall also include procedures for addressing pollutants entering the MS4 from an interconnected, adjoining MS4.

   Illicit connections and illicit discharges must be identified through, but not limited to: field screening, inspections, complaints/reports, construction inspections, maintenance inspections, source control inspections, and/or monitoring information, as appropriate.

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

c. Each Permittee shall implement an Ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the Permittee's MS4 to the maximum extent allowable under state and federal law. A list of allowable discharges and conditionally allowable discharges provided in section S5.C.5.c.i. and ii. If any of the discharges in these lists are identified as significant sources of pollutants to waters of the State, the City will further address the situation.

d. Each Permittee shall implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4.12. The program shall include the following components:

i. Procedures for conducting investigations of the Permittee's MS4, including field screening and methods for identifying potential sources. These procedures may also include source control inspections.

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

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

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

iii. An ongoing training program for all municipal field staff, who, as part of their normal job responsibilities, might come into contact with or otherwise observe an illicit discharge and/or illicit connection to the MS4, on the identification of an illicit discharge and/or connection, and on the proper procedures for reporting and responding to the illicit discharge and/or connection. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of the trainings provided and the staff trained.

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

i. Procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the Permittee. Procedures shall address the evaluation of whether the discharge must be immediately contained and steps to be taken for containment of the discharge.

ii. Procedures for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, collecting and analyzing water samples, and/or other detailed inspection procedures.

iii. Procedures for eliminating the discharge, including notification of appropriate authorities (including owners or operators of interconnected MS4s); notification of the property owner; technical assistance; follow-up inspections; and use of the compliance strategy developed pursuant to S5.C.5.c.iv, including escalating enforcement and legal actions if the discharge is not eliminated.

iv. Compliance with the provisions in (i), (ii), and (iii), above, shall be achieved by meeting the following timelines:

a) Immediately respond to all illicit discharges, including spills, which are determined to constitute a threat to human health, welfare, or the environment, consistent with General Condition G3.

b) Investigate (or refer to the appropriate agency with the authority to act) within 7 days, on average, any complaints, reports, or monitoring information that indicates a potential illicit discharge.
c) Initiate an investigation within 21 days of any report or discovery of a suspected illicit connection to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection.
d) Upon confirmation of an illicit connection, use the compliance strategy in a documented effort to eliminate the illicit connection within 6 months. All known illicit connections to the MS4 shall be eliminated.

f. Permittees shall train staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, and illicit connections, to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

g. Recordkeeping: Each Permittee shall track and maintain records of the activities conducted to meet the requirements of this Section. In the Annual Report, each Permittee shall submit data for the illicit discharges, spills and illicit connections including those that were found by, reported to, or investigated by the Permittee during the previous calendar year. The data shall include the information specified in Appendix 12 and WQWebIDDE. Each Permittee may either use their own system or WQWebIDDE for recording this data. Final submittals shall follow the instructions, timelines, and format as described in Appendix 12.

2.5.2 Ongoing Activities

The City enacted an ordinance prohibiting non-stormwater illicit discharges in to its MS4 and continues detecting and identifying illicit discharges/connections. Upon detection, the City may take immediate containment action if applicable. It also traces, characterizes, documents and reports in compliance with the requirements of this permit section.

In addition, the City seeks compliance within the permit allowed time frames, and will use the structure required in the permit and in the Guidance Manual prepared by Herrera in 2013. The City will continue to train municipal staff on illicit discharge detection, characterization, compliance enforcement, clean-up/containment, host a citizen hotline (360-279-4764), and maintain an up to date map, and appropriate record keeping for the annual report.

The City performs ditch inspections during the summer months and has trained all Public Works Divisions to watch for signs of illicit discharges/connections and spills while performing routine work throughout the City. This includes water, sewer, storm drain, solid waste, streets, and engineering divisions. Some of the specific items observed for are visual indicators and odors for septic systems, restaurants, automotive shop inspections, industrial connections, etc. as well as illicit dumping and general observation of the system. In addition, all of this is observed while performing outfall and catch basin inspections, system cleaning, mowing, and maintenance work.

Staff training has occurred with periodic follow up training. More training will occur as the new Guidance Manual is implemented.

The City informs the public and specific target audiences through direct communications, as well as general messaging. The City's Storm Drain and Wastewater Collections Compliance Inspector/Educator educates and informs businesses and HOAs about illicit discharges while educating about source and spill control. General messaging includes storm drain stenciling, an IDDE video on channel 10, programs in schools, amongst other activities.

2.5.3 Planned Activities

The City screened 100 percent of its system prior to January 1, 2019 and will continue to screen at least 12 percent of the system annually per S5.C.5.d.i.(a). The City will utilize screening methods described in *Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual (Herrera Environmental Consultants, Inc.; May 2013*), or another methodology of comparable or improved effectiveness and will document the field screening methodology in the Annual Report. The City will continue to utilize die testing where appropriate.

2.6 Controlling Runoff from New Development, Redevelopment and Construction Sites (S5.C.6.)

The SWMP requirements for controlling runoff from new development, redevelopment and construction sites (Section S5.C.6 of the Phase II Permit) are summarized below, followed by a description of the ongoing and planned SWMP activities that meet these requirements.

2.6.1 Permit Requirements

Section S5.C.6.a-e of the Phase II Permit lists the following requirements:

- Develop and implement an ordinance or ordinance revisions that address runoff from new development, redevelopment and construction projects in a manner that meets the minimum requirements established by Ecology.
- Develop and implement a site planning process, selection and design criteria for best management practices (BMPs) that will protect water quality and reduce the discharge of pollutants to the maximum extent practicable.
- Develop and implement an approval process for new development that includes inspections and enforcement of maintenance standards for private stormwater facilities.
- Revise and implement provisions in development code regarding techniques for low impact development (LID) that make LID the preferred and commonly used approach to site development in order to minimize impervious surfaces, native vegetation loss and stormwater runoff in all types of development situations.
- Develop and implement a permitting process with plan review, inspection and enforcement capability for both public and private projects to ensure sufficient stormwater management, proper installation and maintenance of erosion control BMPs and permanent stormwater facilities, and assignment of responsibility for post-construction maintenance.
- Inspect all construction sites before construction, if they exhibit high potential for sediment transport during construction, to ensure adequate erosion and sediment control BMPs, and again upon completion of construction to ensure proper installation of permanent stormwater controls.
- Implement an ordinance or other enforceable mechanism to verify long-term operation and maintenance (O&M) of post-construction facilities and BMPs.

- Establish standards for stormwater facility maintenance that are equivalent to those included in Ecology's Stormwater Management Manual for Western Washington (Ecology 2012/14).
- Conduct annual inspections of stormwater treatment and flow control facilities permitted by the City; inspect all new flow control and water quality treatment facilities for new residential developments that are part of a larger common plan for development or sale.
- Develop a record keeping procedure for inspection reports, warning letters, notices of violations and other enforcement records.
- Provide copies of notice of intent (NOI) letters to representatives of proposed new development and redevelopment projects.
- Train City staff responsible for implementing the program described above, including staff involved with permitting, plan review, construction site inspections and enforcement.

2.6.2 Recent and Ongoing Activities

The City has been and will continue to implement the above permit requirements that were required under the 2013 to 2019 NPDES II Permit. In accordance with the 2019 to 2024 NPDES II permit requirements, the City will update the SWMP to meet any currently unmet requirements of section S5.C.6.b.i through iii by June 30, 2022. Included (but not limited too) these activities are addressing construction/post-construction runoff controls, make Notice of Intents (NOIs) available for sites that require a Construction Stormwater General Permit or an Industrial Stormwater Permit from Ecology, perform site plan review and permitting per the Oak Harbor Municipal Code (OHMC 12.30) (Stormwater Management), perform construction and post-construction inspections, require long-term maintenance and train staff in all aspects of this Permit requirement.

- On December 31 of 2016, we adopted a new City code incorporating development principals that are in accordance with LID design and including adoption of the 2012/14 DOE SWMM Manual, thus complying with Permit Appendix I standards. This update included reviewing and revising the applicable parts of the development code to make Low Impact Development (LID) the preferred approach. The process included both external (public) and internal stakeholders' meetings with discussion of pros and cons of possible code changes and solicitation of inputs. A summary of the results of the LID review and revision process was included with the annual report, completed March 31, 2017.
- The City began this specific process in 2015, with City staff scheduling meetings about the upcoming code changes and sending staff to significant training. Previously, the City had received a grant and worked with Puget Sound Partnership and AHBL to update the Municipal Code to remove barriers to LID. This previous effort, along with the extensive training, proved quite valuable in this latest code update.
- In 2016 and 2017 the City sent staff members to Statewide Certification courses. Four staff members have attended sufficient classes and tested to earn certificates from the Statewide Low Impact Training Program. Two employees earned both the Design Certificate and the Operations and Maintenance Certificate. Two other employees earned the Operations and Maintenance Certificate.
- On January 31, 2018 three staff members (2 planners and 1 engineer) attended the forum titled "A Future for Stormwater Management In Puget Sound" at the Washington Stormwater Center at WSU Puyallup Extension.

- Staff attended a DOE meeting regarding new permit requirements in Mt. Vernon in 2018 and participated in two phone forums.
- Staff has also informed City elected officials, the City Administrator and City Attorney of upcoming permit requirements.
- On March 3, 2020 four staff members attended Development Reviewer (Washington State Plane Review) training at Snohomish County.

The City has been reviewing developments and redevelopments under the revised code and have not found any barriers to LID to exist. If barriers are found to exist, the pertinent section of the code will be reviewed and revised appropriately.

2.6.3 Planned Activities

In accordance with the 2019 to 2024 NPDES II permit requirements, the City will update the SWMP to meet any currently unmet requirements of section S5.C.6.b.i through iii by June 30, 2022.

2.7 Operation and Maintenance (S5.C.7.)

This section summarizes Phase II Permit requirements related to pollution prevention and O&M for municipal operations (Section S5.C.7) and describes current and planned SWMP activities related to these requirements.

2.7.1 Permit Requirements

Section S5.C.7.a-g of the Phase II Permit lists the following requirements:

- Established standards for stormwater facility maintenance that are equivalent to those included in Ecology's Stormwater Management Manual for Western Washington (2012 as amended in 2014).
- Develop maintenance standards for facilities that currently do not have them.
- Inspect municipally owned or operated permanent stormwater treatment and flow control facilities (other than catch basins) annually and take appropriate maintenance actions.
- Conduct spot checks of potentially damaged permanent treatment and flow control facilities (other than catch basins) after major (greater than 24-hour, 10-year recurrence interval rainfall) storm events.
- Inspect, and clean if necessary, all catch basins and inlets owned or operated by the City at least once by August 1, 2017, and then every two years thereafter. Compliance will be determined by the presence of an established inspection program designed to inspect all sites and achieving 95% of inspections.
- Establish and implement practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned and maintained by the City including streets, parking lots, roads, highways, buildings, parks, open space, road right-of-ways, maintenance yards and stormwater treatment and flow control BMPs/facilities.
- Develop and implement an ongoing training program for City employees whose construction, operations or maintenance job functions may adversely affect stormwater quality.
- Develop and implement a stormwater pollution prevention plan for all heavy equipment maintenance or storage yards and material storage facilities owned or operated by the City.
- Maintain records of inspections and maintenance or repair activities.

2.7.2 Ongoing Activities

The City will continue to maintain the City's MS4, annually inspect all City-owned stormwater treatment and flow control BMPs/facilities, perform spot checks of facilities after large storm events, follow the Stormwater Pollution Prevention Plans for municipal lands and facilities, and provide appropriate staff training. We will also document and track maintenance activities. The City will continue to inspect and clean as needed all City owned catch basins and inlets. We had been doing a two-year cleaning and inspection program prior to the permit requirement.

The City's Stormwater Facilities Maintenance Manual includes methods to determine if and what type of maintenance is required and also gives a time frame of when the work must be completed in order to have the least amount of impact created during municipal operations.

The City's Stormwater Pollution Prevention Plan includes employee training and policies to prevent and reduce stormwater pollution from activities including, but not limited to, application of fertilizers, pesticides and herbicides, sediment and erosion control, landscape maintenance and vegetation disposal, trash management and building exterior cleaning and maintenance. These pollution reduction activities are used at all City owned or maintained properties, including but not limited to, parks and open spaces, road right-of-ways, maintenance yards and stormwater treatment and flow control facilities.

2.7.3 Planned Activities

The City will continue with the ongoing activities. In addition, during the coming year, the City will:

- Continue assessment of maintenance standards to identify any facilities that may have been omitted or that need enhanced maintenance standards.
- Perform spot checks of stormwater BMPs/facilities if there are significant storms.
- Continue the process of updating stormwater facility standards. The City adopted the 2012/14 Ecology Manual in 2016 and requires that significant O&M Manuals be developed for all new facilities installed under SMMWW minimum requirements 6 and 7, whether public or private.

2.8 Source Control Program for Existing Development (S5.C.8.)

a. The Permittee shall implement a program to prevent and reduce pollutants in runoff from areas that discharge to the MS4. The program shall include:

   i. Application of operational source control BMPs, and if necessary, structural source control BMPs or treatment BMPs/facilities, or both, to pollution generating sources associated with existing land uses and activities.
   ii. Inspections of pollutant generating sources at publicly and privately owned institutional, commercial and industrial sites to enforce implementation of required BMPs to control pollution discharging into the MS4.
   iii. Application and enforcement of local ordinances at sites, identified pursuant to S5.C.8.b.ii, including sites with discharges authorized by a separate NPDES permit. Permittees that are in compliance with the terms of this Permit will not be held liable by Ecology for water quality standard violations or receiving water impacts caused by

industries and other Permittees covered, or which should be covered under an NPDES permit issued by Ecology.

iv. Practices to reduce polluted runoff from the application of pesticides, herbicides, and fertilizers from the sites identified in the inventory.

The City of oak Harbor has an existing operational source control program. It will expand this program to meet the above goals and minimum permit requirements per section S5.C8.b. The earliest minimum requirement milestone is August 1, 2022. The 2021 SWMP update will further develop this program.

2.9 Monitoring and Assessment (S8)

This section summarizes Phase II Permit requirements related to stormwater monitoring and assessment (Section S8) and describes current and planned activities related to these requirements.

2.9.1 Requirements

Because Oak Harbor chose S8.B Status and Trends Monitoring Option #1 and S8.C Effectiveness Studies Option 1 in the 2013 to 2018 permit, it had to make two one-time payments per S8A.1 and S8B.1 by December 1, 2019. These payments were made.

Oak Harbor also had to perform its own monitoring and effectiveness studies or choose to pay into collective funds annually. Oak Harbor chose to not perform its own monitoring and effectiveness studies. Therefore, it will make annual payments to regional monitoring and collective effectiveness studies per options S8A.2.a and S8B.2.a. The City has notified DOE of its choice in accordance with the required notification due date.

The pertinent requirements of the above 3 sections are below:

a. Regional Status and Trends Monitoring

i. All Permittees that chose S8.B Status and Trends Monitoring Option #1 in the Phase II Western Washington Municipal Stormwater Permit, August 1, 2013 – July 31, 2018 (extended to July 31, 2019), shall make a one-time payment into the collective fund to implement regional small streams and marine nearshore areas status and trends monitoring in Puget Sound. This payment is due on or before December 1, 2019. Submit payment according to Section S8.D, below. *Previously Addressed (Paid).*

ii. All City and County Permittees covered under the Phase II Western Washington Municipal Stormwater Permit, August 1, 2013 – July 31, 2018 (extended to July 31, 2019), except the Cities of Aberdeen and Centralia, shall notify Ecology in writing which of the following two options for regional status and trends monitoring (S8.A.2.a or S8.A.2.b) the Permittee chooses to carry out during this permit term. The written notification with G19 signature is due to Ecology no later than December 1, 2019.

a) Make annual payments into a collective fund to implement regional receiving water status and trends monitoring of either: small streams and marine nearshore areas in Puget Sound; or, urban streams in Clark and Cowlitz Counties in the Lower Columbia River basin, depending on the Permittee's

location. The annual payments into the collective fund are due on or before August 15 each year beginning in 2020. Submit payments according to Section S8.D, below.

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

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

ii. All City and County Permittees covered under the Phase II Western Washington Municipal Stormwater Permit, August 1, 2013 – July 31, 2018 (extended to July 31, 2019), shall notify Ecology in writing which of the following two options (S8.B.2.a or S8.B.2.b) for effectiveness and source identification studies the Permittee chooses to carry out during this permit term. The written notification with G19 signature is due to Ecology no later than December 1, 2019.

a) Make annual payments into a collective fund to implement effectiveness and source identification studies. The annual payments into the collective fund are due on or before August 15 each year beginning in 2020. Submit payments according to Section S8.D, below.

2.9.2 Recent and Ongoing Activities

Oak Harbor paid the two one-time payments per S8A.1 and S8B.1 prior to December 1, 2019. Oak Harbor also notified Ecology that it will pay annually into the collective funds for the regional status and trends monitoring and the stormwater effectiveness studies. These annual payments are to be:

- S8A Regional Status and Trends Monitoring = $3,778.
- S8B SWMP Effectiveness & Source Identifications Studies = $6,904.

No monitoring for TMDLs has been undertaken because TMDLs have not been established for Oak Harbor at this time.

2.9.3 Planned Activities

The City will make annual payments per Appendix 11 by August 15 of each year, beginning in 2020.

3 REFERENCES

Ecology. 2012 Stormwater Management Manual for Western Washington as Amended in December 2014. Washington Department of Ecology publication 12-10-030.

Western Washington Phase II Municipal Stormwater Permit – August 1, 2019 to July 31, 2024.

Western Washington Phase II Municipal Stormwater Permit – August 1, 2013 to July 31, 2019.