



2016 Stormwater Management Program Plan



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City of Milton

2016 Stormwater Management Program

1. Introduction

1.1 Purpose

This document is the City of Milton's Stormwater Management Program Plan (SWMP). Preparation and maintenance of this SWMP is required by the Western Washington Phase II Municipal Stormwater Permit (Permit) which is overseen by the Washington State Department of Ecology. The Permit requires that the City prepare a document outlining the programs and actions that the City intends to take in order to maintain compliance with the Permit. This report covers activities planned for 2016. All Milton residents and businesses are encouraged to call Public Works at 253-922-8738 with any questions or suggestions regarding any information in this report.

1.2 The NPDES Program

The National Pollutant Discharge Elimination System (NPDES) is a program created under the Federal Clean Water Act with the intent of protecting and restoring water quality in lakes, streams, and other surface waters so that they can support "beneficial uses" such as fishing and swimming. Governmental and private entities wishing to discharge water or wastewater to surface waters for certain activities regulated by the federal government are required to obtain permits and comply with permit conditions or face the potential for fines and other penalties. NPDES permits are required for large construction sites, a variety of industrial activities, publicly-owned wastewater treatment plants, and municipal stormwater systems.

In Washington State, the US Environmental Protection Agency has delegated the authority over NPDES permits to the Washington State Department of Ecology (Ecology). Ecology has issued several general permits for discharges from stormwater systems that apply to large and small municipalities and that are located in different regions of the State (Eastern and Western Washington). Phase I generally refers to municipalities with populations greater than 100,000, while Phase II applies to municipalities with a population of less than 100,000 and that are located in urban areas.

1.3 The Western Washington Phase II Municipal Stormwater Permit

Milton must comply with the conditions in the Western Washington Phase II Municipal Stormwater Permit. The Permit allows municipalities to discharge stormwater from municipal systems into "waters of the state" such as rivers, lakes and streams, as long as programs are implemented to reduce pollutants in stormwater to the "maximum extent practicable". The city is required to develop and maintain programs and conduct activities in the following program areas:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination (IDDE)
- Controlling Runoff from New Development, Redevelopment, and Construction Sites
- Municipal Operations and Maintenance

In addition to the SWMP components, the Permit contains special conditions covering:

- Compliance with Total Maximum Daily Load (TMDL) requirements
- Monitoring and Assessment
- Reporting Requirements

The City's SWMP Plan must be prepared and submitted annually and must contain the planned actions and activities that will be used in the current year to maintain compliance with the permit. The SWMP is available upon request at any time and is required to be posted on the Milton website no later than May 31, 2016.

In addition, the Permit requires the City to submit an Annual Report by March 31st of each year that details actions taken in the previous year to achieve compliance. The full text of the Permit can be viewed upon request by contacting the City of Milton Public Works Department and also can be found at: <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/phaseIIww/wwphiipermit.html>.

1.4 Permit History and Implementation

The original NPDES Phase II Permit was valid for 5 years, from February 17, 2007 to February 15, 2012, and allowed for phased implementation of stormwater management programs and actions. In 2012, Ecology extended the existing Permit to July 31, 2013 with no new permit conditions.

The current Permit was issued on August 1, 2012, was modified January 16, 2015 and expires on July 31, 2018. Like the previous Permit, it allows for phased implementation of requirements over the five-year permit cycle. Appendix 1 provides an overall schedule timeline including implementation due dates. Milton continues to be in position to meet deadlines and maintain Permit compliance.

1.5 Current and Planned Activities

The SWMP Plan is a set of actions and activities comprising the stormwater program components listed in the Permit and the actions necessary for permit compliance. The plan is organized in accordance with program components addressed in Condition S5C of the Permit.

The following sections of the SWMP Plan describe requirements in the Permit, followed by the ongoing and planned activities to meet each permit component.

1.6 City Coordination and Responsibilities

Compliance with the Permit requires coordination and documentation of activities across City departments. The Public Works Department Stormwater Group coordinates city programs and activities and meets with staff from other departments regularly to ensure that current and planned activities meet Permit requirements. Activities required for Permit compliance cover a broad range of municipal activities.

2. Public Education and Outreach

2.1 Permit Requirements

The SWMP shall include an education and outreach program designed to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourage the public to participate in stewardship activities. The education program may be developed and implemented locally or regionally.

The minimum performance measures are:

a. Each Permittee shall provide an education and outreach program for the area served by the municipal separate storm sewer system (MS4). The program shall be designed to educate target audiences about the stormwater problem and provide specific actions they can follow to minimize the problem.

i. To build general awareness, Permittees shall select from the following target audiences and subject areas:

(a) General public (including school age children), and businesses (including home-based and mobile businesses)

- General impacts of stormwater on surface waters.
- Impacts from impervious surfaces.
- Impacts of illicit discharges and how to report them.
- Low impact development (LID) principles and LID BMPs.
- Opportunities to become involved in stewardship activities.

(b) Engineers, contractors, developers and land use planners

- Technical standards for stormwater site and erosion control plans.
- LID principles and LID BMPs.
- Stormwater treatment and flow control BMPs/facilities.

ii. To effect behavior change, Permittees shall select from the following target audiences and BMPs:

(a) General public (which may include school age children), businesses (including home-based and mobile businesses)

- Use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.
- Equipment maintenance.
- Prevention of illicit discharges.

(b) Residents, landscapers and property managers/owners

- Yard care techniques protective of water quality.
- Use and storage of pesticides and fertilizers and other household chemicals.
- Carpet cleaning and auto repair and maintenance.
- Vehicle, equipment and home/building maintenance.
- Pet waste management and disposal.
- LID principles and LID BMPs.
- Stormwater facility maintenance.
- Dumpster and trash compactor maintenance.

- b. Each Permittee shall create stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities such as stream teams, storm drain marking, volunteer monitoring, riparian plantings and education activities.
- c. Each Permittee shall measure the understanding and adoption of the targeted behaviors for at least one target audience in at least one subject area. No later than February 2, 2016, Permittees shall use the resulting measurements to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors. Permittees may meet this requirement individually or as a member of a regional group.

2.2 Ongoing and Planned Education and Outreach Programs and Activities

Milton has various activities and programs that meet the Permit requirements. Because Milton is a small city with limited resources, the City participates in regional efforts and adapts programs and educational materials from larger municipalities when appropriate.

Table 2.2 identifies ongoing programs and activities that help Milton comply with the Permit, and includes specific actions planned for 2016.

Table 2.2 Public Education and Outreach: Programs and Activities	
Ongoing	Plan for 2016
1. A Stormwater Education booth is staffed at the annual Milton Days festival held every August at Milton Community Park. The Stormwater Education booth provides various educational materials related to stormwater pollution prevention. Also, the City purchased an Enviroscope® Watershed/Nonpoint Source Model for use at the booth, which is popular with children.	Staff Stormwater Education booth at Milton Days.
2. Milton partners with the Pierce Conservation District (PCD) to maintain a volunteer water quality monitoring program on Surprise Lake, a privately-owned lake within the city.	Continue volunteer monitoring program.
3. Milton helps to staff the Pierce Conservation District "Stream Team" booth at the Washington State Fair in Puyallup.	Continue to staff Stream Team booth
4. The City prepares various handouts and brochures to educate Milton citizens, businesses and the development community on development requirements, best management practices and stormwater pollution prevention.	Prepare two new brochures: <ul style="list-style-type: none"> 1. Erosion and Sediment Control for Small Construction Sites 2. Benefits of Low Impact Development.
5. The City prepares a newsletter, "Stormwater Press", that is mailed out in the city's utility bill. This mailing occurs once or twice a year.	Prepare and mail two Stormwater Press newsletters.
6. The City prepares a newsletter for lakeshore owners, "Surprise Lake Matters", that is mailed annually to lakeshore owners and residents.	Prepare and mail one newsletter.

<p>7. The City maintains a hotline to report spills and pollution (253-922-8738). The number is advertised in the Stormwater Press and also on the City's webpage. An online reporting form is also available on the website.</p>	<p>Continue to maintain spill and pollution reporting hotline and webpage.</p>
<p>8. The City includes materials related to public education and outreach on its website.</p>	<p>Update and improve stormwater education webpage.</p>
<p>9. The City monitors and participates in STORM and other regional activities</p>	<p>Continue to participate in regional activities</p>
<p>10. The City owns a car wash kit, which is available for loan for fundraising car washes.</p>	<p>Continue to maintain car wash kit loan program.</p>
<p>11. The City shall measure the understanding and adoption of at least one targeted behavior. No later than February 16, 2016, the City shall use the resulting measurements to direct education resources effectively, and evaluate changes in the targeted behavior.</p>	<p>Develop and implement plan to meet requirement.</p>

3. Public Involvement and Participation

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.

The minimum performance measures are:

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

3.2 Ongoing and Planned Activities for Public Involvement and Participation

Milton currently implements activities and programs meeting the Permit requirements.

Table 3.2 identifies ongoing programs and activities that help Milton comply with the Permit, and includes specific actions planned for 2016.

Table 3.2 Public Involvement and Participation: Programs and Activities	
Ongoing	Plan for 2016
1. Use City Council Meetings as a forum for public participation.	Discuss the SWMP Plan at one Council Meeting in 2016.
2. Post the Milton SWMP Plan and Annual Report to Ecology on the City website each year.	Post the SWMP Plan and Annual Report on the website no later than May 31, 2016.
3. Make the SWMP Plan, Annual Report and related documents available to the public upon request.	Continue to ensure documents are available to the public. Documents will be posted on City’s webpage.
4. Ensure public participation in the storm utility billing process.	Audit of storm utility bills was completed in 2015. In early 2016 results of audit will be implemented.
5. The city encourages employees and citizens to attend fund raising events such as the Seattle Mariners’ “Puget Sound Starts Here” night or the “Water 4 Life” event in Tacoma.	City staff will attend both of these events.

4. Illicit Discharge Detection and Elimination (IDDE)

4.1 Permit Requirements

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. Mapping of the MS4 shall continue on an ongoing basis. MS4 maps shall be periodically updated. Update maps if necessary to meet the requirements of this section no later than February 2, 2018. At a minimum, maps shall include the following information:
 - i. Known MS4 outfalls and known MS4 discharge points.
 - ii. Receiving waters, other than ground water.
 - iii. Stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee.
 - iv. 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 attributes shall be mapped:
 - Tributary conveyance type, material, and size where known.
 - Associated drainage areas.
 - Land use.
 - v. All connections to the MS4 authorized or allowed by the Permittee after February 16, 2007.
 - vi. Connections between the MS4 owned or operated by the Permittee and other municipalities or public entities.
 - vii. Geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters.
 - viii. To the extent consistent with national security laws and directives, each Permittee shall make available to Ecology upon request, MS4 map(s) depicting the information required in S5.C.3.a.i through vi above. The preferred format for mapping will be an electronic format with fully described mapping standards. An example description is available on Ecology website.
 - ix. 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.
- b. Each Permittee shall implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the Permittee's MS4 to the maximum extent allowable under state and federal law.
 - i. Allowable Discharges: The regulatory mechanism does **not** need to prohibit the following categories of non-stormwater discharges:
 - Diverted stream flows
 - Rising ground waters
 - Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(b)(20))
 - Uncontaminated pumped ground water
 - Foundation drains
 - Air conditioning condensation
 - Irrigation water from agricultural sources that is commingled with urban stormwater
 - Springs
 - Uncontaminated water from crawl space pumps
 - Footing drains

- Flows from riparian habitats and wetlands
 - Non-stormwater discharges authorized by another NPDES or state waste discharge permit
 - Discharges from emergency firefighting activities in accordance with S2 Authorized Discharges
- ii. Conditionally Allowable Discharges: The regulatory mechanism may allow the following categories of non-stormwater discharges only if the stated conditions are met:
- Discharges from potable water sources, including but not limited to water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted, if necessary, and volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4.
 - Discharges from lawn watering and other irrigation runoff. These discharges shall be minimized through, at a minimum, public education activities (see section S5.C.1) and water conservation efforts.
 - Dechlorinated swimming pool, spa and hot tub discharges. The discharges shall be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted and reoxygenized if necessary, volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
 - Street and sidewalk wash water, water used to control dust, and routine external building washdown that does not use detergents. The Permittee shall reduce these discharges through, at a minimum, public education activities (see section S5.C.1) and/or water conservation efforts. To avoid washing pollutants into the MS4, Permittees shall minimize the amount of street wash and dust control water used.
 - Other non-stormwater discharges. The discharges shall be in compliance with the requirements of a pollution prevention plan reviewed by the Permittee, which addresses control of such discharges.
- iii. The Permittee shall further address any category of discharges in (i) or (ii) above if the discharges are identified as significant sources of pollutants to waters of the State.
- iv. The ordinance or other regulatory mechanism shall include escalating enforcement procedures and actions.
- v. The Permittee shall implement a compliance strategy that includes informal compliance actions such as public education and technical assistance as well as the enforcement provisions of the ordinance or other regulatory mechanism. To implement an effective compliance strategy, the Permittee's ordinance or other regulatory mechanism may need to include the following tools:
- The application of operational and/or structural source control BMPs for pollutant generating sources associated with existing land uses and activities where necessary to prevent illicit discharges. The source control BMPs referenced in this subsection are in Volume IV of the *Stormwater Management Manual for Western Washington*, or an equivalent manual approved by Ecology under the 2013 Phase I Permit.
 - The maintenance of stormwater facilities which discharge into the Permittee's MS4 in accordance with maintenance standards established under S5.C.4 and/or S5.C.5 where necessary to prevent illicit discharges.
- vi. The Permittee's ordinance or other regulatory mechanism in effect as of the effective date of this permit shall be revised if necessary to meet the requirements of this section no later than February 2, 2018.

- c. Each Permittee shall implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4. The program shall include the following components:
- i. Procedures for conducting investigations of the Permittee's MS4, including field screening and methods for identifying potential sources.
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 Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*, Center for Watershed Protection, October 2004, or another methodology of comparable or improved effectiveness. The Permittee shall document the field screening methodology in the relevant Annual Report. All Permittees, except for the City of Aberdeen, shall complete field screening for at least 40% of the MS4 no later than December 31, 2017, and on average 12% each year thereafter.
 - 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.
 - iv. Permittees shall inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.
- d. Each Permittee shall implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the Permittee's MS4. The program shall include:
- i. Procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the Permittee. Procedures shall address the evaluation of whether the discharge must be immediately contained and steps to be taken for containment of the discharge.
 - ii. Procedures for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, collecting and analyzing water samples, and/or other detailed inspection procedures.
 - iii. Procedures for eliminating the discharge; including notification of appropriate authorities; notification of the property owner; technical assistance; follow-up inspections; and use of the compliance strategy developed pursuant to S5.C.3.b.v, 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:
 - 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.
 - 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.
 - 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.
 - 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.
- e. 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.

- f. Recordkeeping: Permittees shall track and maintain records of the activities conducted to meet the requirements of this section.

4.2 Ongoing and Planned IDDE Activities

Milton currently implements activities and programs meeting the Permit requirements. The City will continue its ongoing program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into the municipal stormwater system. In addition, Milton is currently upgrading its stormwater maps from paper-based to GIS.

Table 4.2 identifies ongoing programs and activities that help Milton comply with the Permit, and includes specific actions planned for 2016.

Table 4.2 Illicit Discharge Detection and Elimination: Programs and Activities	
Ongoing	Plan for 2016
1. Maintain a map of stormwater facilities that meets Permit requirements.	GIS based maps will be updated as needed to keep them current.
2. Milton MMC 13.26 prohibits non-stormwater, illicit discharges to drainage facilities and surface waters.	No code updates planned for 2016
3. Maintain an enforcement strategy that emphasizes voluntary compliance with stormwater regulations. Voluntary compliance is <u>always</u> preferred.	Continue to encourage voluntary compliance.
4. Milton MMC 13.26 requires local source control (LSC) in accordance with the Volume IV of the Stormwater Management Manual for Western Washington.	Investigate opportunities to partner with Tacoma-Pierce County Health Department on local source control.
5. Maintain a program to detect, identify and resolve illicit discharges and connections.	Prepare Standard Operating Procedures to meet the new field screening requirements.
6. Maintain a publicized hotline for reporting spills and pollution.	Phone number (253-922-8738) is publicized on web page and in Stormwater Press and Surprise Lake Matters newsletters.
7. Maintain a training program for field staff who may observe illicit discharges and connections during the course of their duties.	Conduct IDDE training for field staff in 2016.
8. Maintain a training program for staff who are responsible for identification and followup activities of illicit discharges and connections.	Continue to investigate training opportunities and provide training to staff.
9. Maintain records.	Continue to maintain records in accordance with permit requirements.

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

5.1 Permit Requirements

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.

The minimum performance measures are:

- a. Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects. The ordinance or other enforceable mechanism to implement (i) through (iii), below, shall be adopted and effective no later than December 31, 2016. The local program adopted to meet the requirements of S5.C.4.a(i) through (iii), below shall apply to all applications¹⁷ 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.

The ordinance or other enforceable mechanism shall include, at a minimum:

- i. 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.
- ii. The local requirements shall include the following requirements, limitations, and criteria that, when used to implement the minimum requirements in Appendix 1 (or program approved by Ecology under the 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*, or a program approved by Ecology under the 2013 Phase I Permit, may cite this choice as their sole documentation to meet this requirement.

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

- 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.
 - iii. Inspect all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection.
 - iv. 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.
 - v. 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.
 - vi. An enforcement strategy shall be implemented to respond to issues of non-compliance.
- c. The program shall include provisions to verify adequate long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities that are permitted and constructed pursuant to (b) above. These provisions shall be in place no later than December 31, 2016. The provisions shall include:
- i. Implementation of an ordinance or other enforceable mechanism that clearly identifies the party responsible for maintenance, requires inspection of facilities in accordance with the requirements in (ii) through (iv) below, and establishes enforcement procedures.
 - ii. Each Permittee shall establish 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*. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard.

The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standard between the period of inspections is not a permit violation.
 - iii. 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.4.b, including those permitted in accordance with requirements adopted pursuant to the 2007-2012 Ecology municipal stormwater permits, unless there are maintenance records to justify a different frequency.

Permittees may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 Certification and Signature.
 - iv. Inspections of all permanent 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 is stopped and the site is fully stabilized) to identify maintenance needs and enforce compliance with maintenance standards as needed.
 - v. Compliance with the inspection requirements in (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.
 - vi. Unless there are circumstances beyond the Permittee's control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:

- Within 1 year for typical maintenance of facilities, except catch basins.
- Within 6 months for catch basins.
- Within 2 years for maintenance that requires capital construction of less than \$25,000.

Circumstances beyond the Permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, the Permittee shall document the circumstances and how they were beyond their control.

- 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.
- 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.
- 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.
- f. Low impact development code-related requirements.
- i. No later than December 31, 2016, Permittees shall review, revise and make effective their local development-related codes, rules, standards, or other enforceable documents to incorporate and require LID principles and LID BMPs. For Permittees in Lewis and Cowlitz Counties, the deadline for this requirement is no later than June 30, 2017.

The intent of the revisions shall be to make LID the preferred and commonly-used approach to site development. The revisions shall be designed to minimize impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations. Permittees shall conduct a similar review and revision process, and consider the range of issues, outlined in the following document: *Integrating LID into Local Codes: A Guidebook for Local Governments* (Puget Sound Partnership, 2012).

- ii. Each Permittee shall submit a summary of the results of the review and revision process in (i) above with the annual report due no later than March 31, 2017. This summary shall include, at a minimum, a list of the participants (job title, brief job description, and department represented), the codes, rules, standards, and other enforceable documents reviewed, and the revisions made to those documents which incorporate and require LID principles and LID BMPs. The summary shall include existing requirements for LID principles and LID BMPs in development-related codes. The summary shall be organized as follows:
 - (a) Measures to minimize impervious surfaces;
 - (b) Measures to minimize loss of native vegetation; and
 - (c) Other measures to minimize stormwater runoff.

5.2 Ongoing and Planned Activities for Controlling Runoff from New Development, Redevelopment and Construction Sites

Milton has a permit program that includes proposed development and redevelopment site plan review and inspections that meets or exceeds the Permit requirements. Milton reviews all proposed construction for stormwater impacts, and requires erosion and sediment control on almost all permitted activities.

Table 4.2 identifies ongoing programs and activities that help Milton comply with the Permit, and includes specific actions planned for 2016.

Table 5.2 Controlling Runoff from New Development, Redevelopment, and Construction Sites: Programs and Activities

Ongoing	Plan for 2016
1. Review development plans in accordance with 2005 Stormwater Management Manual for Western Washington (SWMMWW).	Revise permit process to implement separate stormwater permit (in addition to building). Revise fees to improve revenue from development activities.
2. Primarily review stormwater site plans in-house with consultant review available.	No change proposed for 2016.
3. Prepare educational handouts for development community explaining requirements. Provide in-person and phone support to help development community understand requirements.	Prepare handout for commercial development for controlling runoff. Update handout for single family residential and small site construction.
4. Require Stormwater Declaration of Covenant for all site plans that meet SWMMWW thresholds.	No change proposed for 2016.
5. Hold erosion and sediment control (ESC) onsite preconstruction meetings for all projects that meet SWMMWW thresholds. Include ESC conditions with all projects.	No change proposed for 2016.
6. Conduct ESC inspections.	No change proposed for 2016.
7. Conduct stormwater site plan inspections.	No change proposed for 2016.
8. Conduct stormwater site plan final inspections.	No change proposed for 2016.
9. Conduct post-construction stormwater facility inspections.	No change proposed for 2016.
10. Maintain enforcement strategy.	Investigate revisions to municipal code to strengthen and expand enforcement options.
11. Maintain recordkeeping of stormwater site plan reviews and inspections.	Purchase new permit tracking software which will simplify and improve recordkeeping.
12. Ensure staff are appropriately trained for plan review, inspections and enforcement. Maintain in-house CESCL certification for stormwater inspection staff. Stormwater site plan review staff are trained in low impact development.	Provide ESC training to Building and Planning staff.
13. Investigate low impact development opportunities.	Finalize code review process to incorporate LID principles as required by Permit.
14. Notify affected development proposals of requirements for Ecology Construction and Industrial Stormwater Permits.	No change proposed for 2016.

6. Municipal Operations and Maintenance

6.1 Permit Requirements

Each Permittee shall implement an operations and maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

The minimum performance measures are:

- a. Each Permittee shall implement maintenance standards that are as protective, or more protective, of facility function than those specified in Chapter 4 of Volume V of the *Stormwater Management Manual for Western Washington*. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard. No later than December 31, 2016, Permittees shall update their maintenance standards as necessary to meet the requirements of this section.
 - i. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standard between inspections and/or maintenance is not a permit violation.
 - ii. Unless there are circumstances beyond the Permittee's control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:
 - Within 1 year for typical maintenance of facilities, except catch basins.
 - Within 6 months for catch basins.
 - Within 2 years for maintenance that requires capital construction of less than \$25,000.

Circumstances beyond the Permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, the Permittee shall document the circumstances and how they were beyond their control.

- b. Annual inspection of all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities, and taking appropriate maintenance actions in accordance with the adopted maintenance standards. Permittees may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 Certification and Signature.
- c. Spot checks of potentially damaged permanent stormwater treatment and flow control BMPs/facilities after major storm events (24-hour storm event with a 10 year or greater recurrence interval). If spot checks indicate widespread damage/maintenance needs, inspect all stormwater treatment and flow control BMPs/facilities that may be affected. Conduct repairs or take appropriate maintenance action in accordance with maintenance standards established above, based on the results of the inspections.
- d. Inspection of all catch basins and inlets owned or operated by the Permittee at least once no later than August 1, 2017 and every two years thereafter. Clean catch basins if the inspection indicates cleaning is needed to comply with maintenance standards established in the *Stormwater Management Manual for Western Washington*. Decant water shall be disposed of in accordance with Appendix 6 *Street Waste Disposal*.

The following alternatives to the standard approach of inspecting all catch basins once no later than August 1, 2017 and every two years thereafter may be applied to all or portions of the system:

- i. The catch basin inspection schedule of every two years may be changed as appropriate to meet the maintenance standards based on maintenance records of double the length of time of the proposed inspection

frequency. In the absence of maintenance records for catch basins, the Permittee may substitute written statements to document a specific, less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experiences and shall be certified in accordance with G19 Certification and Signature.

ii. Inspections at least once by August 1, 2017 and every two years thereafter may be conducted on a “circuit basis” whereby 25% of catch basins and inlets within each circuit are inspected to identify maintenance needs. Include an inspection of the catch basin immediately upstream of any system outfall or discharge point, if applicable. Clean all catch basins within a given circuit for which the inspection indicates cleaning is needed to comply with maintenance standards established under S5.C.5.a, above.

iii. The Permittee may clean all pipes, ditches, catch basins, and inlets within a circuit once during the permit term. Circuits selected for this alternative must drain to a single point.

- e. Compliance with the inspection requirements in b, c, and d above shall be determined by the presence of an established inspection program designed to inspect all sites and achieving at least 95% of inspections.
- f. 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. 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
- g. 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, 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 and the staff trained.
- h. 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 *General NPDES Permit for Stormwater Discharges Associated with Industrial Activities* or another NPDES permit that authorizes stormwater discharges associated with the

activity. A schedule for implementation of structural BMPs shall be included in the SWPPP. Generic SWPPPs that can be applied at multiple sites may be used to comply with this requirement. The SWPPP shall include periodic visual observation of discharges from the facility to evaluate the effectiveness of the BMP.

- i. Maintain records of inspections and maintenance or repair activities conducted by the Permittee.

6.2 Ongoing and Planned Activities for Municipal Operations and Maintenance

Milton currently implements activities and programs meeting the Permit requirements.

Table 6.2 identifies ongoing programs and activities that help Milton comply with the Permit, and includes specific actions planned for 2016.

Table 6.2 Municipal Operations and Maintenance: Programs and Activities	
Ongoing	Plan for 2016
1. Maintain maintenance standards in accordance with Volume V of the SWMMWW.	No changes planned for 2016.
2. Conduct annual inspections of stormwater treatment and flow control BMPs/facilities.	No changes planned for 2016.
3. Spot check stormwater treatment and flow control/BMPs/facilities after major storm events.	No changes planned for 2016.
4. Inspect all catch basins and inlets by August 1, 2017.	Inspect 25% of catch basins and inlets in 2016.
5. Maintain practices, policies and procedures to reduce stormwater impacts from City-owned or maintained lands.	Update procedures as appropriate.
6. Maintain practices, policies and procedures to reduce stormwater impacts from road maintenance activities.	Update procedures as appropriate.
7. Maintain an ongoing training program for City staff whose job functions may impact stormwater quality.	Provide training on stormwater pollution prevention best management practices.
8. Maintain a Stormwater Pollution Prevention Plan (SWPPP) for the City Shop and material storage yards.	Update SWPPP as appropriate.
9. Maintain records of inspections and maintenance or repair activities.	Upgrade process to maintain records in accordance with permit requirements.

7. Special Conditions

7.1 Compliance with Total Maximum Daily Load Requirements

The federal Clean Water Act requires that Ecology establish “Total Maximum Daily Loads” (TMDL) for rivers, streams, lakes, and marine waters that don’t meet water quality standards. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards.

After the TMDL has been calculated for a given water body, Ecology determines how much each source must reduce its discharges of the pollutant in order bring the water body back into compliance with the water quality standards. TMDL requirements are included in the Permit for discharges into affected water bodies.

Stormwater discharges covered under the Permit are required to implement actions necessary to achieve the pollutant reductions called for in applicable TMDLs. Applicable TMDLs are those approved by the EPA before the issuance date of the Permit or which have been approved by the EPA prior to the issue date of the Permit or the date Ecology issues coverage under the Permit, whichever is later. Information on Ecology’s TMDL program is available on Ecology’s website at www.ecy.wa.gov/programs/wq/tmdl.

In accordance with Permit condition S7 Compliance with Total Maximum Daily Load Requirements the City must comply with the following TMDL: **NONE**

8. Monitoring and Assessment

8.1 Permit Requirements

- A. All Permittees including Secondary Permittees shall provide, in each annual report, a description of any stormwater monitoring or stormwater-related studies conducted by the Permittee during the reporting period. If other stormwater monitoring or stormwater-related studies were conducted on behalf of the Permittee during the reporting period, or if stormwater-related investigations conducted by other entities were reported to the Permittee during the reporting period, a brief description of the type of information gathered or received shall be included in the annual report.
- B. Status and trends monitoring. By December 1, 2013, the city shall notify Ecology in writing which of the following two options for status and trends monitoring the Permittee chooses to carry out during this permit cycle. Either option will fully satisfy the Permittee's obligations under this section (S8.B). Each Permittee shall select a single option for the duration of this permit term.
1. Status and Trends Monitoring Option #1: Each Permittee that chooses this option shall pay into a collective fund to implement RSMP small streams and marine nearshore status and trends monitoring in Puget Sound. The payments into the collective fund are due to Ecology annually beginning August 15, 2016. The payment amount for Milton is \$1,597.

Or

2. Status and Trends Monitoring Option #2: Each Permittee that chooses this option shall conduct status and trends monitoring as follows:
 - a. Beginning no later than October 31, 2014, conduct wadeable stream water quality, benthos, habitat, and sediment chemistry monitoring according to the Ecology-approved Quality Assurance Project Plan (QAPP) for RSMP Small Streams Status and Trends Monitoring.
 - i. Permittees with population less than 10,000 in the permit coverage area shall conduct this monitoring at the first two qualified monitoring locations (as listed sequentially among the potential monitoring locations defined in the RSMP QAPP) that are located within the jurisdiction's boundaries. Counties shall monitor the first location inside UGA boundaries and the first location outside UGA boundaries.
- C. Stormwater management program effectiveness studies. By December 1, 2013, the city shall notify Ecology in writing which of the following two options for effectiveness studies the Permittee chooses to carry out during this permit cycle. Either option will fully satisfy the Permittee's obligations under this section (S8.C). Each Permittee shall select a single option for the duration of this permit term.
1. Effectiveness Studies Option #1: Each Permittee that chooses this option shall pay into a collective fund to implement RSMP effectiveness studies. The payments into the collective fund are due to Ecology annually beginning August 15, 2014. The payment amount for Milton is \$2,661

Or

2. Effectiveness Studies Option #2: Each Permittee that chooses this option shall conduct stormwater discharge monitoring in accordance with Appendix 9 and the following:
 - a. By February 2, 2014, each Permittee shall submit to Ecology a draft stormwater discharge monitoring QAPP for review and approval. If Ecology does not request changes within 90 days, the draft QAPP is considered approved. Final QAPPs shall be submitted to Ecology as soon as possible following finalization.
 - i. Each Permittee with population fewer than 10,000 in the permit coverage area shall conduct stormwater discharge monitoring at one discharge monitoring location.
 - b. Permittees shall document in the QAPP why selected discharge monitoring locations are of interest for long term stormwater discharge monitoring and associated stormwater management program

effectiveness evaluations. Permittees are encouraged to monitor at locations chosen and submitted in the annual reports that were due March 31, 2011.

- c. Flow monitoring at discharge monitoring locations shall be implemented beginning no later than October 1, 2014. Stormwater discharge monitoring shall be fully implemented no later than October 1, 2015. All monitoring shall be conducted in accordance with an Ecology-approved QAPP.

D. Source identification and diagnostic monitoring. The City shall pay into a collective fund to implement the RSMP Source Identification Information Repository (SIDIR). The payments into the collective fund are due to Ecology annually beginning August 15, 2014. The payment amount for Milton is \$247.

8.2 Ongoing and Planned Activities for Monitoring and Assessment

Milton has chosen to pay in to the collective funds for the Status and Trends Monitoring and Effectiveness Studies. This is much more cost effective than conducting in-house monitoring as allowed in Option #2 for each of the monitoring options.

Table 8.2 identifies ongoing programs and activities that help Milton comply with the Permit, and includes specific actions planned for 2016.

Table 8.2 Monitoring and Assessment: Programs and Activities	
Ongoing	Plan for 2016
1. Pay in to collective fund for Status and Trends Monitoring.	3rd payment of \$1,597 due August 15, 2016.
2. Pay in to collective fund for Effectiveness Studies.	3rd payment of \$2,661 due August 15, 2016.
3. Pay in to collective fund for Source Identification Information Repository.	3rd payment of \$247 due August 15, 2016.