



STORMWATER MANAGEMENT PROGRAM PLAN



CITY OF MEDINA

20198

INTRODUCTION

This document has been prepared to meet the Western Washington Phase II Municipal Stormwater Permit (Permit) requirement for the continued development and updating of a Stormwater Management Program (SWMP). The purpose of the SWMP is to reduce the discharge of pollutants from the municipal stormwater system to the maximum extent practicable (MEP), to meet state AKART (all known, available, and reasonable methods of prevention, control and treatment) requirements, and protect water quality. The purpose of the SWMP Plan is to inform the public of the planned SWMP activities for the upcoming calendar year.

The National Pollutant Discharge Elimination System (NPDES) Permit is a federal permit that regulates stormwater and wastewater discharges to waters of the State. While it is a federal permit, the regulatory authority was passed on to the Washington State Department of Ecology (Ecology). In response, Ecology developed and issued the Western Washington Phase II Municipal Stormwater Permit. The Permit was issued by Ecology on January 17, 2007 and was modified in 2009 and 2012. A new permit was issued August 1, 2013 and was intended to extend until July 31, 2018. Due to the need for more time to prepare for the next permit cycle, Ecology has extended this permit to July 31, 2019. It is the intent of this SWMP Plan to recognize the current permit requirements and to plan for these requirements where appropriate.

All municipalities affected by the permit must create and implement a SWMP which addresses the following required program elements:

- 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
- Total Maximum Daily Loads (TMDLs), if applicable to the jurisdiction
- Monitoring and Assessment
- Reporting Requirements

The City of Medina SWMP Plan will be updated annually and submitted with the City's Annual Report to Ecology. The City of Medina is posting this document on the City web site so it can be viewed by the public. Comments on the City's SWMP Plan can be made by submitting comments in writing to the City of Medina. Comments can be delivered or mailed to City of Medina, 501 Evergreen Point Road, Medina, WA 98039 ATTN: Ryan Osada, Public Works Director. Email comments may be sent to: rosada@medina-wa.gov.

1.0 PUBLIC EDUCATION AND OUTREACH

The following section describes the Permit requirements related to Public Education and Outreach and the planned activities the City intends to conduct to meet these requirements.

1.1 Permit Requirements

The 2013 Permit (Section S5.C.1) requires the City to include an education and outreach program designed to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourages public participation in stewardship activities:

- The program shall be designed to educate target audiences about the stormwater problem and provide specific actions they can follow to minimize the problem. The target audiences include the general public (including school-age children) and businesses (including home-based or mobile businesses); engineers, contractors, developers, and land use planners; and residents, landscapers, and property managers/owners.
- Create stewardship opportunities to participate in such activities as stream teams, storm drain marking, volunteer monitoring, education, and riparian plantings.
- Measure the understanding and adoption of the targeted behaviors for at least one target audience no later than February 2, 2016.

1.2 Planned Activities

Future activities planned to meet the Public Education and Outreach requirement of the permit are listed in Table 1.

Table 1

Planned Activities for Public Education and Outreach Program

Task	Task Description	Schedule
1-1	Awareness for general public and businesses – general impacts of impervious surfaces and stormwater, and opportunities for involvement: Quarterly newsletter on stormwater topics.	Annually
1-2	Awareness for general public and businesses – impacts of illicit discharges and how to report them: Quarterly newsletter.	Annually
1-3	Awareness for general public and businesses – low impact development principles and BMPs: Quarterly newsletter.	Annually
1-4	Awareness for engineers, contractors, and land use planners – technical standards for stormwater site and erosion control plans: Documentation within permit packets.	Ongoing
1-5	Awareness for engineers, contractors, and land use planners – technical standards for stormwater treatment and flow control BMPs/facilities: City code/standards and link to Ecology Manual on City website.	Ongoing
1-6	Awareness for engineers, contractors, and land use planners – technical standards for LID principles and BMPs: link on City website to Ecology Stormwater Mgmt./LID Manual.	Ongoing
1-7	Effect behavior change for general public – prevention of illicit discharges: publish new posters at city hall and post items to City website.	Ongoing
1-8	Effect behavior change for general public – pet waste management and disposal: maintain facilities/education signs located at parks.	Ongoing
1-9	Effect behavior change for residents, landscapers, and property managers/owners – LID principles and BMPs: link on City website to Ecology Stormwater Mgmt./LID Manual.	Ongoing
1-10	Measure and evaluate understanding of targeted behavior for at least one targeted audience in at least one subject –target landscaping companies on landscaping BMPs (handout pamphlet and then get business card so a survey can be emailed to the companies at the Wells Medina Nursery).	May 2018 Ongoing
1-11	Redirect education and outreach if necessary based upon measured results. Measure (via surveys) of the effectiveness of the landscaping education efforts.	September May 2018 9

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2.0 PUBLIC INVOLVEMENT AND PARTICIPATION

The following section describes the Permit requirements related to Public Involvement and Participation and the planned activities the City intends to conduct to meet these requirements.

2.1 Permit Requirements

The 2013 Permit (Section S5.C.2) requires the City to provide ongoing opportunities for public involvement through advisory councils, public hearings, watershed committees, participation in developing rate structures or other similar activities.

- Create opportunities for the public to participate in the decision making processes involving the SWMP.
- The SWMP Plan and Annual Report shall be posted to the City’s website no later than May 31st of each year.

2.2 Planned Activities

Future activities planned to meet the Public Involvement and Participation requirement of the permit are listed in Table 2.

Table 2

Planned Activities for Public Involvement and Participation

Task	Task Description	Schedule
2-1	Hold public meeting on the SWMP and SWMP Plan via the City Council	Early April (each year)
2-2	Post final SWMP Plan and Annual Report to City website, with hard copies for review at City Hall	May 31 st (each year)
2-3	Post public opportunities to get involved on City website (i.e. links to Sound Salmon Solutions, King County, etc.)	Ongoing

3.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

The following section describes the Permit requirements related to Illicit Discharge Detection and Elimination (IDDE) and the planned activities the City intends to conduct to meet these requirements.

3.1 Permit Requirements

The 2013 Permit (Section S5.C.3) requires the City to provide ongoing program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges.

- Update and maintain City stormwater basemap which shall include all known outfalls, receiving waters, stormwater treatment and flow control facilities, tributary conveyances and drainage basins where the outfall is 24-inches in diameter, or larger.
- Implement an ordinance that effectively prohibits non-stormwater, illicit discharges into the storm system to the maximum extent allowable under state and federal law.
 - The ordinance shall describe the allowable discharges and shall include escalating enforcement procedures and actions.
 - The City shall implement a compliance strategy to enforce the ordinance such as public education, technical assistance, application of operational and/or source control BMPs and maintenance of stormwater facilities.
 - This ordinance shall be reviewed and revised (if necessary) by February 2, 2018.
- Implement IDDE program that includes:
 - Procedures for conducting investigations, including field screening of the system for illicit discharges/connections. Field screening shall be completed for 40% of the system no later than December 31, 2017 and then an average of 12% each year thereafter.
 - Publicize hotline for public reporting of spills and illicit discharges.
 - Informing employees, general public, and businesses of hazards associated with illicit discharges and improper disposal of waste.
 - Implement a program to address illicit discharges including procedures for characterizing any illicit discharges, tracing the source of the discharge, eliminating the discharge, and related enforcement activities.
 - Training program for City field staff for identification, investigation, termination, cleanup, and reporting of illicit discharges. Document and maintain records of the training provided and staff trained.
 - Track and maintain records of activities conducted to prevent, detect, characterize, trace, and eliminate illicit connections and discharges.

3.2 Planned Activities

Future activities planned to meet the Illicit Discharge and Detection and Elimination (IDDE) requirement of the permit are listed in Table 3.

Table 3

Planned Activities for Illicit Discharge Detection and Elimination

Task	Task Description	Schedule
3-1	Provide general public with information related to IDDE including hotline on City website.	Ongoing
3-2	Maintain stormwater basemap.	Ongoing
3-3	Field screen 12% of system each year for IDDE. (Maintain records of areas that have been field screened and date inspected).	<ul style="list-style-type: none"> ▪ 48% of total system inspected by Dec. 31, 2017 (<i>Need 12% inspected each year from 2018 on</i>)
3-4	Renew IDDE training for field staff and public employees (Track each training session with names of employees and date).	Fall 2018 9
3-5	Provide general public and businesses with brochures related to IDDE (track number of brochures and date delivered).	<ul style="list-style-type: none"> ▪ Annually for general public & businesses ▪ Ongoing with permit handouts for construction
3-6	Track and maintain records of IDDE program activities.	<ul style="list-style-type: none"> ▪ Ongoing

4.0 CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES

The following section describes the Permit requirements related to controlling runoff from new development, redevelopment and construction sites. It also describes the planned activities the City intends to conduct to meet these requirements.

4.1 Permit Requirements

The 2013 Permit (Section S5.C.4) requires the City to implement and enforce a program to reduce pollutants in stormwater runoff from public and private new development, redevelopment and construction site activities.

- Implement an ordinance to address runoff from these activities to be adopted and effective no later than December 31, 2016.
 - The ordinance addressing specific requirements in S5.C5.a(i) through (iii) shall apply to all applications submitted on or after January 1, 2017 and shall apply to projects approved prior to January 1, 2017 which have not started construction by January 1, 2022.
 - Adopt Minimum Requirements, thresholds and definitions in Appendix 1 of the Permit.
 - Include legal authority to inspect and enforce maintenance standards for private facilities for new development or redevelopment.
- Implement a site plan permitting and review process, inspection and enforcement to meet development standards for both private and public projects, effective no later than December 31, 2016.
 - Review all stormwater site plans.
 - Inspect all permitted sites that have a high potential for sediment transport:
 - Prior to clearing and construction
 - During construction (for erosion control)
 - Upon completion of construction to verify proper installation
 - After construction of permanent stormwater facilities with maintenance plan in place.
 - Maintain records of all inspections, warning letters, notices of violations, and other enforcement records. At least 80% of scheduled inspections need to be completed to be in compliance with the permit.
 - Enforcement policy to respond to issues of non-compliance.
- Include provision to verify adequate long-term operation and maintenance of stormwater treatment and flow control BMPs/facilities. The ordinance must:
 - Be implemented by December 31, 2016.

- Clearly identify the party responsible for maintenance.
 - Establish maintenance standards as protective as Chapter 4, Volume V of the *Stormwater Management Manual for Western Washington*.
 - Address annual inspections of all permitted stormwater treatment and flow control BMPs/Facilities unless there are maintenance records to justify a different frequency.
 - Address inspections of all permitted 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).
 - Maintain records of all inspections, warning letters, notices of violations, and other enforcement records. At least 80% of scheduled inspections need to be completed to be in compliance with the permit.
 - If an inspection identifies an exceedance of the maintenance standard, then the following maintenance should be performed:
 - Inspections to be held within 1 year for typical maintenance, except catch basins
 - Within 6 months for catch basins
 - Within 2 years for maintenance that requires capital construction of less than \$25,000
- Make available the “Notice of Intent for Construction Activity” and “Notice of Intent for Industrial Activity” to developers.
 - Train staff in the site plan review process, inspections, and enforcement. Maintain records of this training and names of staff trained.
 - Implement low impact development (LID) code no later than December 31, 2016.
 - Conduct review of local development-related codes to incorporate and require LID principles and BMPs using Integrating LID into *Local Codes: A Guidebook for Local Governments* (Puget Sound Partnership).
 - Submit summary of the review with annual report by March 31, 2017. The summary is to include existing LID requirements, a list of participants (job title, brief job description, department represented), the codes, rules, standards, and revisions made which incorporate LID principles and LID BMPs. It shall be organized into:
 - measures to minimize impervious surfaces,
 - measures to minimize loss of native vegetation and
 - other measures to minimize stormwater runoff.

4.2 Planned Activities

Future activities planned to meet the Control Runoff from New Development, Redevelopment, and Construction Sites requirement of the permit are listed in Table 4.

Table 4

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

Task	Task Description	Schedule
4-2	Review site plans for compliance with City Code (Keep track of number of site plans reviewed)	Ongoing
4-3	Inspect construction sites prior to and during construction for erosion control.	Ongoing
4-4	Provide post-construction inspections to verify proper maintenance.	Ongoing
4-5	Maintain records of inspections (Include name of inspector, date, findings, warning letters, notices of violations, enforcement actions).	Ongoing <i>(Need to complete 80% of scheduled inspections)</i>
4-6	Provide annual inspections of all stormwater treatment and flow control BMPs/facilities. <ul style="list-style-type: none"> ▪ Maintain inspection records. ▪ Document reduced inspection frequency used. ▪ If inspection reveals substandard maintenance, perform maintenance: <ul style="list-style-type: none"> ○ within 1 year (except catch basins) ○ within 6 months for catch basins, or ○ within 2 years for maintenance that requires capital construction of less than \$25,000. 	Ongoing <i>(Need to complete 80% of scheduled inspections)</i>
4-7	Make available the “Notice of Intent for Construction Activity” and “Notice of Intent for Industrial Activity” to developers with link on City website.	Ongoing
4-8	Train staff in the site plan review process, inspections, and enforcement. Maintain records of this training and names of staff trained.	Ongoing/New Hires
4-9	Implement new LID codes (per LID Guidebook): Step 1 (assemble team), Step 2 (understand general topics to address), and Step 3 (review existing codes and standards)	July 2018
4-10	Implement new LID codes (per LID Guidebook): Step 4 (amend existing code and develop new code)	July 2018
4-11	Implement new LID codes (per LID Guidebook): Step 5 (public review and adoption process)	July 2018
4-12	Implement new LID codes by Dec. 31, 2016: Step 6 (implementation per LID Guidebook)	July 2018
4-13	Summary of code review. Summary to include: <ul style="list-style-type: none"> ▪ Existing LID requirements ▪ A list of participants (job title, brief job 	July 2018

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Task	Task Description	Schedule
	<p>description, department represented);</p> <ul style="list-style-type: none"> <li>• The codes, rules, and standards reviewed, and revisions made which incorporate LID principles and LID BMPs; <li>• Organized into a) measures to minimize impervious surfaces, (b) measures to minimize loss of native vegetation and c) other measures to minimize stormwater runoff. 	

5.0 MUNICIPAL OPERATIONS AND MAINTENANCE

The following section describes the Permit requirements related to the City's stormwater operation and maintenance practices. It also describes the planned activities the City intends to conduct to meet these requirements.

5.1 Permit Requirements

The 2013 Permit (Section S5.C.5) requires the City to 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.

- Establish maintenance standards as protective as Chapter 4, Volume V of the *Stormwater Management Manual for Western Washington*.
- If an inspection identifies an exceedence of the maintenance standard, then the following maintenance should be performed:
 - Inspections to be held within 1 year for typical maintenance, except catch basins
 - Within 6 months for catch basins
 - Within 2 years for maintenance that requires capital construction of less than \$25,000.
- Perform annual inspections and take appropriate maintenance actions of all permitted stormwater treatment and flow control BMPs/Facilities unless there are maintenance records to justify a different frequency.
- Spot check and if necessary, repair 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).
- Inspect (and clean if necessary) all catch basins and inlets owned by the City at least once no later than August 1, 2017 and every two years thereafter. Alternatives to this schedule include:
 - Revised inspection frequency allowed if maintenance records for double the length of the proposed inspection frequency warrant a reduced inspection frequency. If these records are not available, certified (per Permit Condition G19), written statements to document a specific, less frequent inspection schedule may be submitted and shall be based on actual inspection and maintenance experiences.
 - Conduct inspections by "circuit basis" whereby 25% of catch basins and inlets within each circuit are inspected. Include an inspection of the catch basin immediately upstream of any system outfall if applicable. Clean all catch basins within a given circuit for which the inspection indicates cleaning is needed.

- 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.
- Implement practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned 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. The following activities are to 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
 - applications of fertilizers/pesticides/herbicides (including reducing nutrients and pesticides using alternatives that minimize environmental impacts)
 - sediment and erosion control
 - landscape maintenance and vegetation disposal
 - trash and pest waste management
 - building exterior cleaning and maintenance
- Implement training program for employees on O&M practices. Follow up training and documentation of training shall be conducted. A list of trained staff shall be maintained.
- Implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards and material storage facilities owned by the City. A schedule for implementation of structural BMPs and periodic visual observation of discharges from the facility to evaluate the effectiveness of the BMP shall be included in the SWPPP. Generic SWPPPs applicable to multiple sites may be used.
- Maintain records of inspection and maintenance or repair activities.

5.2 Planned Activities

Future activities planned to meet the Municipal Operations and Maintenance requirement of the permit are listed in Table 5.

Table 5

Planned Activities for Municipal Operations and Maintenance

Task	Task Description	Schedule
5-2	Provide annual inspections of all stormwater treatment and flow control BMPs/facilities. <ul style="list-style-type: none"> ▪ Document if a reduced inspection frequency is used. ▪ If inspection reveals that a maintenance standard is not being maintained, perform maintenance: <ul style="list-style-type: none"> ○ within 1 year (except catch basins) ○ within 6 months for catch basins or ○ within 2 years for maintenance that requires capital construction of less than \$25,000. 	Ongoing
5-3	Spot check treatment and flow control facilities/BMPs after major storm and repair if necessary.	After 10-year peak storm event (Ongoing)
5-4	Inspect all catch basins and inlets	Due August 1, 2019
5-6	Train staff in O&M operations, inspection procedures, reporting water quality concerns, and on efforts to reduce pollutants to runoff. Maintain records of this training and names of staff trained.	Ongoing/New Hires
5-8	Maintain records of inspections and maintenance activities.	Ongoing

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6.0 STORMWATER MANAGEMENT PROGRAM FOR SECONDARY PERMITTEES

The City of Medina is not a secondary permittee, therefore this section is not applicable.

7.0 COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

Currently, there are no Total Maximum Daily Load (TMDL) studies or requirements within the City of Medina or Lake Washington, therefore this section is not applicable.

8.0 MONITORING AND ASSESSMENT

The following section describes the Permit requirements related to monitoring. It also describes the planned activities the City intends to conduct to meet these requirements.

8.1 Permit Requirements

The 2013 Permit (Section S8) requires the City to describe any stormwater monitoring or stormwater-related studies conducted throughout the year in the Annual Report.

- Reporting involved with monitoring, studies, or analyses conducted as part of the Regional Stormwater Management Program (RSMP) is not necessary as part of the Annual Report.
- The regional program includes status and trends monitoring, stormwater management program effectiveness studies, and source identification/diagnostic monitoring. The City of Medina has selected to participate in Option #1 for the Status and Trends Monitoring, Effectiveness Studies, and Source Identification and Diagnostic Monitoring.

8.2 Planned Activities

Future activities planned to meet the monitoring requirement of the permit are listed in Table 8.

Table 8

Planned Activities for Monitoring and Assessment Requirements

Task	Task Description	Schedule
8-1	Opt into Regional Stormwater Management Program by paying the following fees: <ul style="list-style-type: none"> ▪ Status and Trends Monitoring: \$728 ▪ Stormwater Program Effectiveness: \$1,212 ▪ Source Identification and Diagnostic Monitoring: \$112 	Pay by August 15 th , each year
8-2	Describe any stormwater monitoring conducted for the year in the Annual Report	March 31 st , each year

9.0 REPORTING REQUIREMENTS

The following section describes the Permit requirements related to reporting. It also describes the planned activities the City intends to conduct to meet these requirements.

9.1 Permit Requirements

The 2013 Permit (Section S9) requires the City to submit an Annual Report.

- The City shall submit an Annual Report by March 31st of each year. The report will include
 - Copy of the current SWMP
 - Annual Report Form (per DOE)
 - Attachments (summaries, descriptions, reports, etc.)
 - Certification and signature
 - Notification of any annexations, incorporations or jurisdictional boundary changes
- Keep all records related to the permit and the SWMP for at least five years.
- All records related to the permit shall be available to the public at reasonable times during business hours.

9.2 Planned Activities

Future activities planned to meet the monitoring requirement of the permit are listed in Table 9.

Table 9

Planned Activities for Reporting Requirements

Task	Task Description	Schedule
9-1	Submit Annual Report	March 31 st , each year