

Town of Steilacoom



Stormwater Management Program

February 2022

1.0 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 and to protect water quality.

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 on June 17, 2009. The 2007-2011 permit was reissued by Ecology to be effective between September 1, 2012 and August 1, 2013. The permit was modified in 2014 and was further modified in January 2015. This permit had an original expiration date of July 31, 2018 but was granted extensions to provide additional coverage.

2019 was a new permit year. The current permit was adopted in August 2019 and will remain in effect until 2024. As such, this document will reflect the City's plans for ongoing compliance with the existing 2019-2024 permit. The Town will commence the process of planning and making modifications to its existing SWMP with the intent of fully complying with the new permit requirements.

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
- Controlling Run-Off from New Development, Redevelopment and Construction Sites
- Municipal Operations and Maintenance
- Total Maximum Daily Loads (TMDLs), if applicable to the jurisdiction

The Town of Steilacoom SWMP is updated annually and submitted with the Town's Annual Report to Ecology. The Town of Steilacoom is posting this document on the Town web site, http://www.townofsteilacoom.com/town_offices/public_works.htm, so it can be viewed by the public. Comments on the Town's SWMP can be made by submitting comments in writing to the Town of Steilacoom. Comments can be delivered or mailed to Town of Steilacoom, 1030 Roe St., Steilacoom, WA 98388 ATTN: Mark Burlingame, Public Works Director. Email comments may be sent to: mark.burlingame@ci.steilacoom.wa.us.

In 2022, Town staff, with the assistance of our consulting engineers, will complete a Stormwater Comprehensive Plan Update. This update will focus on new and upcoming NPDES requirements, drainage area characteristics, additions and corrections to the current plan, operations and maintenance, capital improvements, and other facets of the stormwater utility. This update will include public participation opportunities with the Town Council and staff.

2.0 PUBLIC EDUCATION AND OUTREACH PROGRAM

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

2.1 Permit Requirements

The 2019-2024 Permit (Section S5.C.1) requires the Town to:

- 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.
- Include an education and outreach program designed to reduce or eliminate behaviors and builds general awareness about methods to address and reduce impacts from stormwater runoff and practices that cause or contribute to adverse stormwater impacts and encourages public participation. The target audiences include the general public, engineers/contractors/developers/land use planners/, residents, landscapers and property managers/owners.
- Include ongoing opportunities for public involvement and participation through advisory councils, public hearings, watershed committees, participation in rate structures or other similar activities.
- 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.
- The Town of Steilacoom began implementing the requirements of S5.C.1 in 2015 and will continue these efforts through the current permit term (2019-2024).
- The Town of Steilacoom will track the cost or estimated cost of development and implementation of each component of the SWMP.
- The Town of Steilacoom will track the number of inspections, official enforcement actions and types of public education activities as required by each program component.
- The Town of Steilacoom will continue to implement existing stormwater management programs until we begin implementation of the updated stormwater management program in accordance with the terms of the permit, including implementation schedules.
- Coordination among entities covered by this permit will occur as needed and may include periodic meetings specifically intended to coordinate the proper implementation of stormwater controls and for the control of pollutants as necessary.

2.2 Planned Activities

Future activities planned to meet the Public Education and Outreach requirement (Section S5.C.2) of the permit are listed in Table 2-1.

Table 2-1

Planned Activities for Public Education and Outreach Program

Task ID	Task Description	Schedule
EDUC-1	Engineers/Contractors/Developers/Land Use Planners – Stormwater treatment and flow control BMPs/facilities: Information included in Builder’s Packet	Ongoing
EDUC-2	General public – general impacts of stormwater: Utility bill insert (newsletter) including storm water topics	Annually
EDUC-3	General public – general impacts: Add Town of Steilacoom link info to “Puget Sound Starts Here” website	On-going
EDUC-4	Engineers/Contractors/Developers/Land Use Planners – Technical standards: Link on Town website to DOE Manual, LID Manual	On-going
EDUC-6	Installation of pervious sidewalks with educational signage to promote at Public Safety road frontage.	December 2017 and then maintain
EDUC-7	Businesses (Restaurants) – prevention of illicit discharges: Deliver restaurant flyer	December 2021
EDUC-8	General public – use and storage of automotive chemicals, etc.: Review info on Town website and update if necessary	March 2022
EDUC-9	General public – impacts of IDDE: Puget Sound posters at library/town hall	August 2021
EDUC-10	Measure and evaluate understanding of targeted behavior for at least one targeted audience in at least one subject.	January 2020-January 2022
EDUC-11	Redirect education if necessary based upon measured results in EDUC-10	January 2022
EDUC-12	Create Demonstration Rain Garden at the Community Center (and maintain)	March 2017, then on-going
EDUC-13	Meet with landowners/developers to find and approve innovative ways to implement LID provisions to new construction	On-going

3.0 PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM

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

3.1 Permit Requirements

The 2019-2024 Permit (Section S5.C.3) requires the Town to:

- Provide ongoing opportunities for public involvement through advisory councils, public hearings, watershed committees, participation in developing rate structures or other similar activities.
- Provide the opportunity for the public to participate in the decision-making processes involving the SWMP.
- The SWMP and Annual Report will be posted to the Town’s website no later than April 30th of each year.

3.2 Planned Activities

Future activities planned to meet the Public Involvement and Participation requirement of the permit are listed in Table 3-1.

Table 3-1

Planned Activities for Public Involvement and Participation

Task ID	Task Description	Schedule
PI-1	Hold a public meeting on the 2022 Stormwater Management Program via the Town Council	April (each year)
PI-2	Post final SWMP and Annual Report to Town Website	By April 30th (each year)
PI-3	Post final SWMP in local library	By April 30 th (each year)
PI-4	Post public opportunities to get involved on Town website (i.e. Adopt-a-Street and volunteer monitoring)	June 2022 and then ongoing

4.0 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 Town intends to conduct to meet these requirements.

4.1 Permit Requirements

The 2019-2024 Permit (Section S5.C.5) requires the Town to:

- Provide an ongoing program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges.
- Field assess at least one high priority waterbody in 2020 for IDDE purposes.
- Update Town stormwater base map which includes all known outfalls, receiving waters, stormwater treatment and flow control facilities, conveyances where the outfall is 24-inches in diameter (or larger), and land use.
- Maintain 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 have an escalating enforcement procedure. This ordinance shall be reviewed and revised (if necessary) by June 1, 2022. The Town shall have a compliance strategy to enforce the ordinance such as public education, technical assistance, inspection, source control and/or maintenance of stormwater facilities.
- Implement IDDE program that includes field screening of the system for illicit discharges/connections (12% each year), procedures for detecting illicit discharges/connection and related enforcement, training for Town staff, and informing businesses of the hazards of illicit discharges,
- Publicize hotline for public reporting of spills and illicit discharges.
- Continue training of field personnel who may come into contact with illicit discharges/illicit connections and the proper procedures for reporting.

4.2 Planned Activities

Future activities planned to meet the Illicit Discharge and Detection and Elimination requirement of the permit are listed in Table 4-1.

Table 4-1

Planned Activities for Illicit Discharge Detection and Elimination

Task ID	Task Description	Schedule
IDDE-1 / EDUC-2	Provide general public with information related to IDDE on Town website	Ongoing
IDDE-2	Maintain stormwater basemap	Ongoing
IDDE-3	Review IDDE ordinance for compliance with the Permit and effectiveness	<ul style="list-style-type: none"> ▪ May 2022 ▪ November 2023
IDDE-4	Field assess high priority waterbody for IDDE.	<ul style="list-style-type: none"> ▪ August 2021
IDDE-5	Field Screen 12% of system for IDDE each year through 2024(Maintain records of which areas have been field screened and date inspected).	<ul style="list-style-type: none"> ▪ August 2021 ▪ August 2022 ▪ August 2023 ▪ August 2024
IDDE-6	Renew IDDE training for field staff and public employees (Track each training session with names of employees and date)	<ul style="list-style-type: none"> ▪ August 2021 and then as needed
IDDE-7 / EDUC- 7	Provide businesses with brochures related to IDDE (track number of brochures and date delivered).	<ul style="list-style-type: none"> ▪ Restaurants: May-August 2022 ▪ General Public: May-August ea./yr. (Farmer's Market) Construction: Ongoing with permit handouts

5.0 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 Town intends to conduct to meet these requirements.

5.1 Permit Requirements

The 2019-2024 Permit (Section S5.C.6) requires the Town to:

- Implement and enforce a program to reduce pollutants in stormwater runoff from new development, redevelopment and construction site activities.
- Implement an ordinance to address runoff from these activities to be effective no later than December 31, 2016.
 - The ordinance addressing specific requirements in S5.C.6 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.
 - Include legal authority to inspect and enforce maintenance standards for private facilities for new development or redevelopment.
 - Include provision to verify adequate long-term operation and maintenance of stormwater treatment and flow control BMPs/facilities. The ordinance must:
 - 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).
- At least 80% of scheduled inspections need to be completed to be in compliance with the permit.
- Adopt Minimum Requirements, thresholds and definitions in Appendix 1 of the Permit.
- Implement a site plan review process, inspection and enforcement to meet development standards for both private and public projects.
 - 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)
 - After construction (permanent stormwater facilities; maintenance plan in place for treatment/flow control BMPS/facilities). 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.
 - Maintain records of all inspections, warning letters, notices of violations, and other enforcement records.
- 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 LID codes 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 a) measures to minimize impervious surfaces, (b) measures to minimize loss of native vegetation and c) other measures to minimize stormwater runoff.
- Watershed-scale stormwater planning via WRIA-12 (i.e. provide support to Pierce County WRIA-12 if the County chooses a watershed that includes the Town of Steilacoom).

5.2 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 5-1.

Table 5-1

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

Task ID	Task Description	Schedule
CTRL-1	Require and review site plans for compliance with SMC 13.50 (Keep track of number of site plans reviewed) for all	Ongoing

Task ID	Task Description	Schedule
	applications for building permits, site development permits, and right-of-way permits	
CTRL-2	Provide post construction inspections prior to approval for compliance with SMC 13.50 (Maintain inspection records; see CTRL-4).	Ongoing
CTRL-3	Inspect constructions sites prior to and during construction for erosion control (Maintain inspection records; see CTRL-4).	Ongoing
CTRL-4	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>
CTRL-5	Provide annual inspections of all stormwater treatment and flow control BMPs/facilities. <ul style="list-style-type: none"> ▪ Maintain inspection records; see CTRL-4. ▪ Document if a reduced inspection frequency is used. ▪ If inspection reveals that a maintenance standard is not being maintained, need to perform maintenance: <ul style="list-style-type: none"> ○ within 1 year (all facilities except catch basins) ○ within 6 months (catch basins) or ○ within 2 years (maintenance that requires capital construction of less than \$25,000). 	Ongoing <i>(Need to complete 80% of scheduled inspections)</i>
CTRL-6	Train staff in the site plan review process, inspections, and enforcement. Maintain records of this training and names of staff trained.	Ongoing/New Hires <ul style="list-style-type: none"> ▪ June 2021 ▪ June 2022 ▪ June 2023 ▪ June2024
CTRL-7	Make available the “Notice of Intent for Construction Activity” and “Notice of Intent for Industrial Activity” to developers.	Ongoing
CTRL-8	Review and revise ordinance for maintenance standard compliance	May 2016 <i>(Due Dec. 31, 2016)</i>
CTRL-9	Implement new LID codes (per LID Guidebook): Step 1 (assemble team), Step 2 (understand general topics to address), and Step 3	March 2017

Task ID	Task Description	Schedule
	(review existing codes and standards)	
CTRL-10	Implement new LID codes (per LID Guidebook): Step 4 (amend existing code and develop new code)	May 2016 – May 2017
CTRL-11	Implement new LID codes (per LID Guidebook): Step 5 (public review and adoption process)	May 2016 – November 2016
CTRL-12	Implement new LID codes: Step 6 (implementation per LID Guidebook) and Summary Report (per Permit requirement): 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 a) measures to minimize impervious surfaces, (b) measures to minimize loss of native vegetation and c) other measures to minimize stormwater runoff.	January 2016 through December 2016 <i>[Implementation due by Dec. 31, 2016]</i>
CTRL-13	Summary Report (per Permit requirement). Report to include: <ul style="list-style-type: none"> ▪ 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. ▪ Organized into a) measures to minimize impervious surfaces, (b) measures to minimize loss of native vegetation and c) other measures to minimize stormwater runoff 	December 2016 <i>[Due with March 31, 2017 annual report]</i>

6.0 MUNICIPAL OPERATIONS AND MAINTENANCE

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

6.1 Permit Requirements

The 2019-2024 Permit (Section S5.C.7) requires the Town 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 Town 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 G19), written statements to document a specific, less frequent inspection schedule may be submitted and will 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 Town 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, and 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 Town. 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.

6.2 Planned Activities

Future activities planned to meet the Municipal Operations and Maintenance requirement of the permit are listed in Table 6-1.

Table 6-1

Planned Activities for Municipal Operations and Maintenance

Task ID	Task Description	Schedule
O&M-1	Maintain records of inspections and maintenance activities.	Ongoing
O&M-2	Provide annual inspections of all stormwater treatment and flow control BMPs/facilities. <ul style="list-style-type: none"> ▪ Maintain inspection records; see O&M-1. ▪ Document if a reduced inspection frequency is used. ▪ If inspection reveals that a maintenance standard is not being 	Ongoing

	<p>maintained, need to perform maintenance:</p> <ul style="list-style-type: none"> ○ within 1 year (all facilities except catch basins) ○ within 6 months (catch basins) or ○ within 2 years (maintenance that requires capital construction of less than \$25,000). 	
O&M-3	Spot check treatment and flow control facilities/BMPs and repair if necessary.	After 24-hour/10-year storms (Ongoing)
O&M-4	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.	<p>Ongoing/New Hires</p> <ul style="list-style-type: none"> ▪ June 2021 ▪ June 2022 ▪ June 2023 ▪ June 2024
O&M-5	Review maintenance related ordinance to ensure Chapter 4, Volume 5 of the Ecology Stormwater Manual has been implemented	May 2021
O&M-6	Review Town's O&M plan to ensure it meets S5.C.5.f (O&M activities)	By December 2022
O&M-7	Review Town's SWPPP to ensure it meets S5.C.7.i (i.e. includes a schedule of structural BMPs and includes periodic visual observation of discharges to evaluate effectiveness of BMPs in place)	By December 2022
O&M-8	Inspect 50% of catch basins and inlets and clean if required.	By December 31, 2022
O&M-9	Inspect all catch basins and inlets	All inspected by Aug 1, 2017
O&M-10	Ensure all fuels and oils are stored within containment areas	Inspect at least once/year (on-going)

7.0 MONITORING

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

7.1 Permit Requirements

The 2019-2024 Permit (Section S8) requires the Town to:

- Describe any monitoring related studies conducted throughout the year in the Annual Report.
- Reporting involved with the Regional Stormwater Management Program 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.

7.2 Planned Activities

Future activities planned to meet the monitoring requirement of the permit are listed in Table 7-1.

Table 7-1

Planned Activities for TMDL Requirements

Task ID	Task Description	Schedule
MON-1	Opt into Regional Stormwater Management Program by paying the following fees: <ul style="list-style-type: none"> ▪ Status and Trends Monitoring: \$1,538 ▪ Stormwater Program Effectiveness: \$2,563 ▪ Source Identification and Diagnostic Monitoring: \$238 	Aug. 15 th , each year <i>(Beginning in 2014)</i> ***fees may be adjusted as deemed necessary
MON-2	Describe any stormwater monitoring conducted for the year in the Annual Report	By March 31 st , each year <i>(Beginning in 2014)</i> and per schedule of Regional Stormwater Management Program

8.0 REPORTING REQUIREMENTS

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

8.1 Permit Requirements

The 2019-2024 Permit (Section S9) requires the Town to:

- Submit an Annual Report by March 31st of each year with the first reporting period being from January 1, 2019 to December 31, 2019. 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.

8.2 Planned Activities

Future activities planned to meet the reporting requirement of the permit are listed in Table 8-1.

Table 8-1

Planned Activities for Reporting Requirements

Task ID	Task Description	Schedule
REP-1	Submit Annual Report	March 31 st , each year <i>(1st report due March 31, 2020)</i>