GRANITE FALLS

STORMWATER MANAGEMENT PROGRAM (SWMP)

2015

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 in 2009 and 2012. A new permit was issued August 1, 2013 and will extend until July 31, 2018. It is the intent of this SWMP 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
- 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 City of Granite Falls SWMP will be updated annually and submitted with the City's Annual Report to Ecology. The City of Granite Falls is posting this document on the City web site (http://ci.granite-falls.wa.us/pages/public-works/storm-water-management.php) so it can be viewed by the public. Comments on the City's SWMP can be made by submitting comments in writing to City of Granite Falls. Comments can be delivered or mailed to City of Granite Falls, 206 S. Granite Ave., P.O. Box 1440, Granite Falls, WA 98252 ATTN: Brent Kirk, Public Works Director. Email comments may be sent to: brent.kirk@ci.granite-falls.wa.us.

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 City intends to conduct to meet these requirements.

2.1 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. The target audiences include the general public, engineers/contractors/developers/land use planners/, 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.

2.2 Planned Activities

Future activities planned to meet the Public Education and Outreach requirement 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: Pamphlet passed out with permits	Ongoing
EDUC-2	General public – pet waste handling facilities/education located at parks	Ongoing
EDUC-3	Coordinate with Snohomish County on education efforts directed at the targeted audiences in the Permit	Ongoing
EDUC-4	General public – general impacts of stormwater: Utility bill insert on stormwater topics	Bi-annually
EDUC-5	General public – use and storage of automotive chemicals, etc.: Review info on City website and update if necessary	December 2015
EDUC-6	General public – impacts of IDDE: Review and publish new posters at library/city hall and post items to website	May 2015
EDUC-7	Measure and evaluate understanding of targeted behavior for at least one targeted audience in at least one subject.	October 2015
EDUC-8	Redirect education if necessary based upon measured results in EDUC-7	January 2016 *(required by Feb. 2, 2016)*

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 City intends to conduct to meet these requirements.

3.1 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.
- Provide the opportunity for the public to participate in the decision making processes involving the SWMP.
- The SWMP and Annual Report shall be posted to the City's website no later than May 31st 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	Post draft and final SWMP / Submitted Annual Report to City Website	February- April (each year) [Final due by May 31st]
PI-2	Post final SWMP in local library	By April 30th (each year)
PI-3	Post public opportunities to get involved on City website (i.e. links to Sound Salmon Solutions, Snohomish County, etc.)	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 City intends to conduct to meet these requirements.

4.1 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.
- Field assess at least one high priority waterbody in 2013 for IDDE purposes.
- Update City stormwater basemap which shall include 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 February 2, 2018.The City shall have a compliance strategy to enforce the ordinance such as public education, technical assistance, source control and/or maintenance of stormwater facilities.
- Implement IDDE program that includes field screening of the system for illicit discharges/connections (40% of the system to be inspected no later than December 31, 2017 and then an average of 12% each year thereafter), procedures for detecting illicit discharges/connection and related enforcement, training for City staff, and informing businesses of hazards with illicit discharges,
- Publicize hotline for public reporting of spills and illicit discharges.

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-6	Provide general public with information related to IDDE including hotline on City website	Ongoing
IDDE-2	Maintain stormwater basemap	Ongoing
IDDE-3	Review IDDE ordinance for compliance with the Permit and effectiveness	▪ November 2017 *(needs to be adopted by Feb. 2, 2018)*
IDDE-4	Field Screen 10% of system for IDDE each year through 2017 and then 12% of the system each year thereafter (Maintain records of which areas have been field screened and date inspected).	▪ August 2015 (Next 10%) ▪ August 2016 (Next 10%) ▪ August 2017 (Next 10% *so that 40% of total system inspected by Dec. 31, 2017*) ▪ August 2018 (*Next 12%)*
IDDE-5	Renew IDDE training for field staff and public employees (Track each training session with names of employees and date)	▪ June 2015 ▪ June 2017
IDDE–6 / EDUC- 6	Provide businesses with brochures related to IDDE (track number of brochures and date delivered).	▪ Businesses: 2015 and ongoing ▪ 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 City intends to conduct to meet these requirements.

5.1 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 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.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.
    - 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 (i.e. provide support to Pierce County if the County chooses a watershed that includes the City of Granite Falls).

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	Review site plans for compliance with City Code (Keep track of number of site plans reviewed)	Ongoing

Task ID	Task Description	Schedule
CTRL-2	Provide post construction inspections prior to approval for compliance with City Code (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 *(Need to complete 80% of scheduled inspections)*
CTRL-5	Provide annual inspections of all stormwater treatment and flow control BMPs/facilities. ▪ 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: o within 1 year (all facilities except catch basins) o within 6 months (catch basins) or o within 2 years (maintenance that requires capital construction of less than $25,000).	Ongoing *(Need to complete 80% of scheduled inspections)*
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 ▪ June 2016 ▪ June 2018
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 2015 *(Due Dec. 31, 2016)*
CTRL-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)	May 2015
CTRL-10	Implement new LID codes (per LID Guidebook): Step 4 (amend existing code and develop	May 2015 – July 2015

Task ID	Task Description	Schedule
	new code)	
CTRL-11	Implement new LID codes (per LID Guidebook): Step 5 (public review and adoption process)	July 2015 – November 2015
CTRL-12	Implement new LID codes: Step 6 (implementation per LID Guidebook)	January 2016 through December 2016 *[Implementation due by Dec. 31, 2016]*
CTRL-13	Summary Report (per Permit requirement). Report 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. ▪ 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 *[Due with March 31, 2017 annual report]*

6.0 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.

6.1 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 evens (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 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, 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 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.

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. ▪ 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 maintained, need to perform maintenance: o within 1 year (all facilities except catch basins) o within 6 months (catch basins) or o within 2 years (maintnenace that requires capital construction of less than $25,000).	Ongoing
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.	Ongoing/New Hires ▪ June 2016 ▪ June 2018
O&M-5	Inspect all catch basins and inlets	All inspected by Aug 1, 2017

7.0 COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

The following section describes the Permit requirements related to the City's participation associated with the Granite Falls River Tributaries' Total Maximum Daily Load (TMDL). It also describes the planned activities the City intends to conduct to meet these requirements.

7.1 Permit Requirements

The 2013 Permit (Appendix 2) requires the City to:

- Business Inspections: Inspect commercial animal handling areas (veterinary and pet care/boarding services, animal slaughtering, and support activities for animal production) and commercial composting facilities to ensure implementation of source control BMPs for bacteria by August 1, 2016. Implement an ongoing inspection program to re-inspect facilities with bacteria source control problems a minimum of every three years.
- Public Education and Outreach: Conduct public education and outreach activities to increase awareness of bacterial pollution problems and promote proper pet waste management behavior.
- Operations and Maintenance: Install and maintain animal waste collection and/or education stations at municipal parks and other City owned lands reasonably expected to have dog and horse use and the potential for pollution of stormwater.
- IDDE: During IDDE-related field screening, screen for bacteria sources in any screened MS4 subbasins which discharge to surface waters in the TMDL area.
- Targeted Source Identification and Elimination: By February 2, 2014, the City shall review the fecal coliform data collected per approved QAPPs under the 2007 Permit and identify a minimum of one high priority area (such as a tributary or a stream segment) that will be the focus of source identification and elimination efforts. Prepare written documentation of this review and the identified high priority area and submit it with the 2014 Annual Report. The City shall begin to implement source identification and elimination efforts in the MS4 subbasins discharging to the identified high priority area no later than August 1, 2014. Stormwater quality sampling for bacteria sources is required. Each annual report's TMDL summary shall include qualitative and quantitative information about the source identification and elimination activities, including procedures followed and sampling results, implemented in the selected high priority area(s).
- Surface Water Monitoring: Review the fecal coliform data collected per approved QAPPs under the 2007 Permit and select surface water monitoring location(s) as appropriate for continued characterization and long term trends evaluation of fecal coliform. Submit a draft revised QAPP to Ecology for review and approval, no later than February 2, 2015. If Ecology does not request changes within 60 days, the draft QAPP is considered approved. At a minimum, the monitoring program shall:

- Begin by August 1, 2015.
- Collect 12 samples in at least one location per calendar year.
- Submit available data to the Environmental Information Management (EIM) database by May 31st of each year.
- Provide data summaries and narrative evaluation of the data in each annual report's TMDL summary.
- Be documented in a QAPP which follows Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies, July 2004, Ecology Publication No. 04-03-030.

7.2 Planned Activities

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

Table 7-1

Planned Activities for TMDL Requirements

Task ID	Task Description	Schedule
TMDL–1	Submit revised QAPP to Ecology showing latest sampling locations	January 2015 *(due Feb. 2, 2015)*
TMDL-2/ REP-1	Submit review of past fecal coliform data (TMDL -) and high priority body w/ 2014 Annual Report	March 2015 *(by March 31, 2015)*
TMDL–3/ IDDE-4	Field screen for bacteria sources during IDDE screenings (i.e. look for fungus, algae, color, rotten egg or musty smell)	Annually (August)
TMDL–4	Continue stormwater sampling for fecal coliform (w/ revised site near Lake Gardner outfall)	Monthly *(or frontload toward summer…min. 12 samples per year, begin by Aug. 1, 2015)*
TMDL-5/ REP-2	Include TMDL Summary with Annual Report regarding source identification and elimination activities (procedures followed, sampling results from TMDL-4, Show figure with results)	March, Annually *(Due Mar. 31st, 1st report due in 2015)*
TMDL–6	Submit data to EIM database	May, Annually *(by May 31st)*
TMDL–7/ EDUC-2	Promote proper pet waste management behavior with pet waste stations at parks	Ongoing

8.0 MONITORING

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 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.

8.2 Planned Activities

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

Table 8-1

Planned Activities for TMDL Requirements

Task ID	Task Description	Schedule
MON-1	Opt into Regional Stormwater Management Program by paying the following fees: ▪ Status and Trends Monitoring: $824 ▪ Stormwater Program Effectiveness: $1,373 ▪ Source Identification and Diagnostic Monitoring: $127	Aug. 15th, each year *(Beginning in 2014)*
MON-2	Describe any stormwater monitoring conducted for the year in the Annual Report	By March 31st, each year *(Beginning in 2015)*

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 by March 31st of each year with the first reporting period being from January 1, 2014 to December 31, 2014. 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 9-1.

Table 9-1

Planned Activities for Reporting Requirements

Task ID	Task Description	Schedule
REP-1	Submit Annual Report	March 31st, each year *(1st report due March 31, 2015)*
REP-2 / TMDL-6	Include TMDL Summary with Annual Report regarding source identification and elimination activities (procedures followed, sampling results in TMDL-4, can show figure with results)	March 31st, each year *(1st report due March 31, 2015)*