

Attachment 1 - Stormwater Management Program (SWMP) Update

BACKGROUND

The National Pollutant Discharge Elimination System (NPDES) permit program is a requirement of the Federal Clean Water Act, which is intended to protect and restore waters for “fishable and swimmable” uses. The Federal Environmental Protection Agency has delegated permit authority to state environmental agencies. In Washington, the NPDES-delegated permit authority is the Washington State Department of Ecology. Since Bonney Lake operates a small municipal storm sewer system that serves less than 100,000 people, it is designated as a Phase II community and must comply with Ecology’s Western Washington Phase II NPDES Municipal Stormwater Permit.

The Permit allows municipalities to discharge stormwater runoff from municipal drainage systems into the State’s water bodies (i.e. streams, rivers, lakes, wetlands, etc.) as long as municipalities implement programs to protect water quality to the “maximum extent practicable” through application of Best Management Practices. These required practices, specified in the Permit, are collectively referred to as the Stormwater Management Program (SWMP).

The Permit requires the City to report annually by March 31st of each year on program implementation for the prior year and requires municipalities to update the SWMP to describe the actions planned to achieve and maintain permit compliance in the upcoming year. The remainder of this document is intended to meet this requirement and describes the actions the City of Bonney Lake has planned to meet the 2016 permit requirements. The SWMP update is organized according to the following program components:

- Public Education and Outreach
- Public Involvement
- Illicit Discharge Detection and Elimination
- Runoff Controls
- Pollution Prevention and Municipal Operations and Maintenance
- Monitoring

PERMIT IMPLEMENTATION ASSISTANCE GRANT

Ecology provides assistance to NPDES Stormwater Municipal Permittees through a biennial Capacity Grant program. Stormwater Capacity Grants are non-competitive grants that are awarded directly to each municipality. Through this program, the City of Bonney Lake received \$50,000 to provide funding for activities, technical resources, and equipment that will help implement the requirements of the NPDES permit in 2016 and 2017.

PHASE II NPDES PERMIT AUDITS

Beginning in 2016, Ecology is beginning a Municipal Stormwater Permit Audit Program to evaluate Phase II Permittees’ compliance with the permit requirements. Ecology will randomly select four municipalities to be audited each year with a goal to audit every jurisdiction every 5-7 years. Bonney Lake was not chosen for an audit in 2016 however, staff will work on organizing permit related documentation, staff training, and proper implementation of policies and procedures in anticipation of a possible audit next year.

SECTION 1 – PLANNED PUBLIC EDUCATION & OUTREACH ACTIVITIES

The Bonney Lake Engineering Division implements an on-going public education and outreach program designed to reduce and eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. The program utilizes a variety of approaches to inform targeted audiences about stormwater issues and provides specific actions people can follow to minimize stormwater pollution. A summary of the major public education activities planned for 2016 is provided below:

- The City of Bonney Lake will continue the Stormwater Pollution Prevention Art Contest and Calendar Project. For the past six years, the city has developed and distributed calendars to promote stormwater pollution prevention practices. To help convey these messages, the city holds an art contest open to our K-12 students. Winning entries from six categories including Pollution / Illegal Dumping Reporting, Friendly Vehicle Washing, Water Conservation, Pet Waste Disposal, Used Oil Recycling, and Household Hazardous Waste Disposal are used to develop the calendar.
- The city anticipates distributing stormwater pollution prevention informational flyers to City households regarding the general impacts of stormwater flows into surface waters and impacts from impervious surfaces including impacts from pet waste, vehicle fluids, household and lawn chemicals, car and impervious surface washing, and automotive and hazardous waste spills.
- At our annual Bonney Lake Days event; the city will continue displaying the stormwater pollution prevention booth and distributing informational flyers associated with proper hazardous waste disposal and information to implement used oil recycling, proper pet waste disposal, and environmentally friendly vehicle washing methods. The flyers also inform residents on natural yard care techniques and ways to conserve water and provides information on how and when to report an illicit discharge, pollution, and illegal dumping.
- The city plans to coordinate with volunteers and continue our storm drain marker program to label storm drains in residential neighborhoods. The curb markers help increase public awareness of the environmental effects of dumping in storm drains and remind the public of the direct connection between storm drains and our surface waters.
- Bonney Lake will continue to offer our “fish friendly” charity car wash kits which are designed to divert wash water to the sanitary sewer system and are loaned out by the City at no cost.
- Bonney Lake staff will continue to participate in regional forums that focus on stormwater education and permit requirements.
- The City of Bonney Lake will update our website stormwater page as needed.
- The City will continue to produce the monthly Bonney Lake Times newsletter which will cover a variety of topics on pollution prevention and general awareness of stormwater related issues. The newsletter is also used to inform the public about progress and implementation of the SWMP.

SECTION 2 – PUBLIC INVOLVEMENT & PARTICIPATION OPPORTUNITIES

The City encourages the public and interested parties to participate in the decision-making process involving the development and implementation of NPDES permit related activities and programs. Opportunities for public participation in the development of the SWMP include the following:

- Implementation of the City storm drain marker program utilizing Eagle Scout candidates and the public to install dump no waste curb markers adjacent to City storm drains.
- Install a staffed stormwater pollution prevention booth at Bonney Lake Days events and discuss the City stormwater pollution prevention public education materials with the community.
- Invite local K-12 students in the Bonney Lake community to participate in the annual stormwater pollution prevention art contest / calendar development program.
- The City's Stormwater webpage provides a general description of the Permit and displays the updated SWMP and the Annual Reports as they become available. Opportunity for public comment and participation is encouraged via e-mail.

SECTION 3 – ILLICIT DISCHARGE DETECTION & ELIMINATION PROGRAM ACTIVITIES

The City of Bonney Lake maintains an ongoing Illicit Discharge Detection and Elimination (IDDE) program designed to prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the municipal stormwater system. A summary of IDDE activities continued in 2016 is provided below:

- Bonney Lake maintains a comprehensive map of our municipal separate storm sewer system (MS4). The map continues to be updated on an ongoing basis to reflect the changes and expansion of the system captured via field survey.
- The City will enforce Ordinance 1330 which prohibits non-stormwater discharges. The City of Bonney Lake will implement escalating enforcement procedures and actions pursuant to those outlined in the Bonney Lake Municipal Code.
- Through the operations and maintenance commercial inspection program, private stormwater systems that discharge into the City's MS4 will be inspected to ensure maintenance complies with standards outlined in the NPDES permit.
- Staff will continue to visually inspect the MS4 for illicit discharges and connections during MS4 maintenance activities and begin the required field screening documentation effort of the MS4 which is required to be 40 percent complete by the end of 2017.
- Follow-up training will be given to municipal staff, who, as part of their normal job duties, might observe an illicit discharge in the field. Training includes how to identify a potential illegal discharge and how to properly respond.

SECTION 4 – EFFORTS TO CONTROL RUNOFF FROM CONSTRUCTION SITES

The City of Bonney Lake recognizes that construction site run-off is a major contributor to water quality degradation in the greater Puget Sound region. To address this issue and to better protect our natural waterways, the City's current construction site run-off program exceeds the minimum

requirements of the current permit in many respects. However, the current permit will require the City to make changes in 2016 to development-related codes, rules, and standards in order to incorporate and require LID principles and Best Management Practices.

- The City will continue to implement and enforce the program to reduce pollutants in stormwater runoff to our MS4 from new development, redevelopment and construction site activities. The program includes a permitting process with site plan review, inspection and enforcement capability to meet the standards for both private and public projects.
- In 2016, the City will continue to implement the most current Pierce County Stormwater & Site Development Manual as currently allowed in the permit. By December 31, 2016 the City will adopt updated stormwater design standards that are equivalent to the Department of Ecology's Stormwater Management Manual for Western Washington.
- City staff will begin reviewing and revising our local development-related codes, rules, standards, and enforceable documents to incorporate and require LID principles and LID Best Management Practices (BMPs). The intent of the revisions is to make LID the preferred and commonly-used approach to site development. Revisions must be complete by December 31, 2016. Staff will track the staff participants (job title, brief job description, and departments 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.

SECTION 5 – POLLUTION PREVENTION, OPERATIONS & MAINTENANCE ACTIVITIES

The City of Bonney Lake has an ongoing Operations and Maintenance (O&M) program to reduce stormwater impacts associated with maintenance and operations of City streets, facilities, and properties. The program applies to drainage infrastructure, which includes catch basins, pipes, open channels, as well as residential and regional retention / detention facilities. In 2016, operations and maintenance staff will continue to perform the required inspections and maintenance outlined in the permit in an effort to prevent and reduce pollutant runoff from municipal operations.

- Bonney Lake operations & maintenance staff will inspect all known municipally owned or operated stormwater treatment and flow control facilities in 2016. Maintenance of facilities will be conducted consistent with the adopted standards.
- Continue to implement our Stormwater Pollution Prevention Plans for heavy equipment maintenance and storage yards. Bonney Lake will continue to train City staff whose job functions may impact stormwater quality and maintain records of inspections, maintenance, and training activities.
- The maintenance standards found in the current Pierce County Stormwater & Site Development Manual will apply until the City adopts updated maintenance standards equivalent to the Stormwater Management Manual for Western Washington (required by December 31, 2016).
- During and after major storm events, facilities vulnerable to surface water related problems will be inspected to ensure the systems are functioning properly, and to determine/conduct any maintenance or repair needs.

- Staff will implement practices and procedures that prevent stormwater impacts associated with pipe and culvert cleaning, ditch maintenance, street cleaning, road repair, snow and ice control, and maintaining roadside areas and vegetation.
- Records of inspections and maintenance or repair activities will be kept in accordance with the S9 Reporting Requirements of the Permit.
- By August 1, 2017 Bonney Lake Operations & Maintenance must inspect, and clean when necessary, all catch basins owned by the City. The removal of sediments laden with contaminants and debris from stormwater catch basins is important to prevent pollution and maintain the flow of the stormwater system. The City has surveyed and assigned an identification number to all catch basins owned by the City for inspection and maintenance purposes. All catch basins will be inspected by August 1, 2017.

SECTION 6 – PLANNED MONITORING ACTIVITIES

The City of Bonney Lake will continue to pay into a collective fund to implement the Regional Stormwater Monitoring Program (RSMP). The RSMP is a collaborative monitoring program paid for by western Washington municipal stormwater Permittees, and administered by Ecology, designed to monitor and evaluate the effectiveness of the Best Management practices specified in the NPDES permits. The goal of the monitoring program is to provide an unbiased assessment of whether stormwater management actions are resulting in genuine progress towards regional water quality targets.

- The City of Bonney Lake will pay into the collective fund to implement the RSMP. The goal of the monitoring is to measure whether the health of surface waters is improving or declining. A payment of \$4,075 is due August 15, 2016.
- Bonney Lake will also pay into the collective fund to implement the RSMP effectiveness studies on behalf of the region. The goal is to provide widely applicable information about what BMP's work, or don't work, and how to improve stormwater management. A payment of \$6,790 is due August 15, 2016.
- The City of Bonney Lake will also pay into a third component of the RSMP, the Source Identification Information Repository. The repository is designed to share information about source identification and elimination methods and identify opportunities for regional solutions to common illicit discharges and pollution problems. A payment of \$630 is due August 15, 2016.

CONCLUSION

The annual report and SWMP update is posted on the City of Bonney Lake website at http://www.ci.bonney-lake.wa.us/section_government/departments/public_works/stormwater.shtml

If at any time the City is unable to comply with the terms and conditions of the permit, staff must notify the Washington State Department of Ecology within 30 days of becoming aware that non-compliance has

occurred. A written notification will include a description of the non-compliance issue and steps planned or taken to achieve compliance. Bonney Lake remains in compliance with all of the requirements of the permit and is using all known, available, and reasonable methods of prevention, control, and treatment to prevent pollution into the surface waters of Washington State.

CALENDAR OF NPDES PERMIT RELATED ACTIVITIES 2013-2018

The timeline below provides an overview of the major activities and deadlines for implementing current and upcoming permit requirements.

Program Component	2013 Ongoing Implementation	2014	2015	2016	2017	Jan – July 31, 2018
S5.A Stormwater Management Program	Continue to track costs and permit related activities. Update the SWMP annually.		By March 31: Include description of internal coordination in annual report.			
S5.C.1 Public Education & Outreach	Continue public education program and create stewardship opportunities.	Measure change in behavior for 1 target audience.		By February 2: Use measure of behavior change to improve program		
S5.C.2 Public Involvement	Continue to provide opportunities for the public to participate in SWMP decision-making. Post online annual reports and SWMP Plan for previous calendar year by March 31 st of each year.					
S5.C.3 Illicit Discharge Detection & Elimination	Continue implementing IDDE program. Provide municipal staff training. Maintain map of MS4				By Dec 31: Field screen at least 40% of MS4.	By Feb 2: Update ordinance as needed. Field screen 12% of MS4
S5.C.4. Control Runoff from Development	Continue to implement program addressing construction / post construction runoff			By Dec 31: Update City code to revised Appendix 1 standards. Revise development codes to make LID the preferred approach.	By March 31: Submit a summary of the review & revision of City codes.	Achieve at least 80% of scheduled inspections.
S5.C.5 Municipal Operations & Maintenance	Continue MS4 maintenance and inspections and provide staff training.				By Dec 31: Update maintenance standards to revised manual / code standards	By Aug 1: Inspect all catch basins or document alternatives if used.

S8.A	Continue to provide description in each annual report of stormwater monitoring or stormwater related studies.	
S8.B.1 Status & Trends Monitoring	By Dec 31: Notify Ecology which option selected for status and trends monitoring.	Option 1: By Aug 15 Pay annual payments to RSMP.
S8.C.1 Effectiveness Studies	By Dec 31: Notify Ecology which option selected for effectiveness monitoring.	Option 1: By Aug 15 Pay annual payments to RSMP.
S8.D Source ID & Diagnostic Monitoring		By Aug 15: Pay annual payments to RSMP.