

THE CITY OF BRIER'S STORMWATER MANAGEMENT PROGRAM (SWMP)

Introduction:

This document has been prepared to meet the City of Brier Western Washington Phase II Municipal Stormwater Permit (Permit) requirement for written documentation of the City's Stormwater Management Program (SWMP).

The City's SWMP is intended to reduce the discharge of pollutants from the City's Municipal Separate Storm Sewer System (MS4) to the maximum extent practicable (MEP), meet Washington State's All Known and Reasonable Treatment (AKART) requirements, and protect water quality. This goal will be accomplished by the inclusion of all Permit SWMP components and implementation schedules into the City's SWMP.

In compliance with Permit requirements, where the City is already implementing actions or activities called for in this document, the City will continue those actions or activities regardless of the schedule called for in this document.

As part of the implementation of the City's SWMP, the City will gather, track, maintain and use information on an on-going basis to evaluate the SWMP development, implementation, Permit compliance, and to set priorities. Beginning no later than January 1, 2009, the City will begin to track the cost of development and implementation of each component of the SWMP.

This document will be updated at least annually for submittal with the City's Annual Report to Ecology.

Section 1: Public Education and Outreach

The City's SWMP will include an education program aimed at residents, businesses, elected officials, policy makers, planning staff and other employees of the City. The goal of the education program will be to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. The City's education program will be developed locally, regionally, and coordinated with the Snohomish County Conservation District.

The City will take the following minimum measures:

A. **Education and Outreach Program:**

No later than February 16, 2009, the City will provide an education and outreach program for the area served by its Municipal Separate Storm Sewer System (MS4). The outreach program will be designed to achieve measurable improvements in the target audience's understanding of the problem and what they can do to solve it.

Education and outreach efforts will be prioritized to target the following audiences and subject areas:

1. General public
 - A poster describing general impacts of stormwater flows into surface waters is available to post in city hall.
 - A door hanger describing impacts from impervious surfaces is available for distribution throughout the city.
 - Posters for responsible automotive care including disposal of chemicals are available for the city hall.
2. General public, businesses, including home-based and mobile businesses
 - Posters for responsible automotive care including use and disposal of hazardous chemicals are available.
 - A brochure detailing the effects of illicit discharges and how to report them is available for distribution and information is on the City's website as well.
3. Homeowners, landscapers and property managers
 - A poster profiling yard care techniques protective of water quality is available.
 - A brochure detailing BMPs for use and storage of pesticides and fertilizers is available for distribution.
 - A brochure detailing BMPs for carpet cleaning and auto repair and maintenance are available for distribution.
 - Low Impact Development techniques, including site design, pervious paving, retention of forests and mature trees, are available on the City's website and at City hall.
 - Stormwater pond maintenance techniques are available on the City's website and at City hall.
4. Engineers, contractors, developers, review staff and land use planners
 - A Surface Water Management program shall be created to educate this target audience on technical standards for stormwater site and erosion control plans.
 - Low Impact Development techniques, including site design, pervious paving, retention of forests and mature trees, are available on the City's website and at City hall.
 - A brochure providing information on stormwater treatment and flow control BMPs is available for distribution.

B. Measurement:

The City will measure the understanding and adoption of the targeted behaviors among the targeted audiences by discussing the SWMP and the understanding of the program at city meetings. The resulting measurements

will be used to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors.

C. Tracking:

The City will track and maintain records of public education and outreach activities.

Section 2: Public Involvement and Participation

The City's SWMP will include ongoing opportunities for public involvement through advisory councils, watershed committees, stewardship programs, environmental activities or other similar activities. The City will comply with applicable State and local public notice requirements when developing its SWMP. The initial draft of the SWMP will be made available for public review and comment. The public review of the SWMP will not be complete prior to submittal to The Department of Ecology for the first annual report.

The City will take the following minimum measures:

A. Opportunities for Public Participation:

The initial draft of the SWMP will be made available for public review and comment. The public review will not be complete prior to submittal to the Department of Ecology for the first annual report. The City will develop and implement a process for consideration of public comments on its SWMP. The city is also interested in environmental activities include the Adopt-A-Stream Program where citizens monitor streams. The city would also like to arrange a program with the local Boy Scout troop that would be involved in labeling catch basins and detention facilities throughout the area.

B. Availability of Documents:

The City will make its SWMP Plan, the annual report required under S9.A of the City's Permit, and all other submittals required by the Permit, available to the public. The annual report, and SWMP that was submitted with the latest annual report, will be posted on the City's website.

Section 3: Illicit Discharge Detection and Elimination (IDD&E)

The City' SWMP will include an ongoing program to detect and remove illicit connections, discharges as defined in 40 CFR 122.26(b)(2), and improper disposal, including any spills not under the purview of another responding authority, into the municipal separate storm sewers owned or operated by the City. The City will fully implement an ongoing illicit discharge detection and elimination program no later than August 16, 2011.

The City will take the following minimum measures:

A. Development of MS4 Map:

A current municipal storm sewer system map is in the process of being developed. The map shall show locations of city owned and privately owned stormwater systems throughout the city and include the following information:

1. The location of all known municipal separate storm sewer outfalls and receiving waters and structural stormwater BMPs owned, operated, or maintained by the City. The City will map the attributes listed below for all storm sewer outfalls with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems:
 - Tributary conveyances (indicate type, material, and size where known).
 - Associated drainage areas.
 - Land use.
2. As part of the building permitting process, the City will initiate a program to develop and maintain a map of all connections to the municipal separate storm sewer authorized or allowed by the City after February 16, 2007.
3. There are no geographic areas served by the City's MS4 that do not discharge stormwater to surface waters.
4. The City will make available to Ecology, upon request, the municipal storm sewer system map depicting the information required in 1. through 3.
5. Upon request, and to the extent appropriate, the City will provide mapping information to co-Permittees and secondary Permittees.

B. IDD&E Ordinance:

The City will develop and implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illegal discharges, and/or dumping into the City's municipal separate storm sewer system to the maximum extent allowable under State and Federal law. The ordinance or other regulatory mechanism will be adopted no later than August 16, 2009.

1. The regulatory mechanism does not need to prohibit the following categories of non-stormwater discharges:
 - Diverted stream flows.
 - Rising ground waters.
 - Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)).
 - Uncontaminated pumped ground water.
 - Foundation drains.

- Air conditioning condensation.
 - Irrigation water from agricultural sources that is commingled with urban stormwater.
 - Springs.
 - Water from crawl space pumps.
 - Footing drains.
 - Flows from riparian habitats and wetlands.
 - Non-stormwater discharges covered by another Permit.
 - Discharges from emergency fire fighting activities.
2. The regulatory mechanism will prohibit the following categories of non-stormwater discharges unless the stated conditions are met:
- Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water, unless planned discharges are de-chlorinated to a concentration of 0.1 ppm or less, pH-adjusted, if necessary, and volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4.
 - Discharges from lawn watering and other irrigation runoff, unless these discharges are minimized through, at a minimum, public education activities (see Section 1) and water conservation efforts.
 - Chlorinated swimming pool discharges, unless the discharges are dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted and reoxygenized if necessary, volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4. Swimming pool cleaning wastewater and filter backwash will not be discharged to the City's MS4.
 - Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents, unless the City reduces these discharges through, at a minimum, public education activities (see section 1) and/or water conservation efforts. To avoid washing pollutants into the City's MS4, the City will minimize the amount of street wash and dust control water used. At active construction sites, street sweeping will be performed prior to washing the street.
 - Other non-stormwater discharges, unless the discharges are in compliance with the requirements of the stormwater pollution prevention plan reviewed by the City, which addresses control of construction site de-watering discharges.
3. The City's SWMP will, at a minimum, address each category in 2 above in accordance with the conditions stated therein.

4. The City's SWMP will further address any category of discharges in 1 or 2 above if the discharges are identified as significant sources of pollutants to waters of the State.
5. The SWMP will include a training program for public works employees to help educate workers on how to spot and report illicit discharges.
6. The City will develop an enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism.

C. Ongoing IDD&E Program:

The City will develop and implement an ongoing program to detect and address non-stormwater discharges, spills, illicit connections and illegal dumping into the City's municipal separate storm sewer system. The program will be fully implemented no later than August 16, 2011 and will include:

1. Procedures for locating priority areas likely to have illicit discharges, including at a minimum: evaluating land uses and associated business/industrial activities present; areas where complaints have been registered in the past; and areas with storage of large quantities of materials that could result in spills.
2. Field assessment activities, including visual inspection of priority outfalls identified in 1, above, during dry weather and for the purposes of verifying outfall locations, identifying previously unknown outfalls, and detecting illicit discharges.
 - Scriber Creek, a tributary of Swamp Creek, has been identified as a priority receiving water and shall be visually inspected no later than February 16, 2010. Field assessments on the creek will be made each year thereafter.
 - Screening for illicit connections will be conducted using: *"Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments"*, Center for Watershed Protection, October 2004, or another methodology of comparable effectiveness. The presence of sewage/septic system sources shall be investigated as part of all screenings.
3. Procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the City. Procedures will include detailed instructions for evaluating whether the discharge must be immediately contained and steps to be taken for containment of the discharge.

Compliance with this provision will be achieved by investigating (or referring to the appropriate agency) within 7 days, on average, any complaints, reports or monitoring information that indicates a potential illicit discharge, spill, or illegal dumping; and immediately investigating (or referring) problems and violations determined to be emergencies or otherwise judged to be urgent or severe.

4. Procedures for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, collecting and analyzing water samples, and/or other detailed inspection procedures.
5. Procedures for removing the source of the discharge; including notification of appropriate authorities; notification of the property owner; technical assistance for eliminating the discharge; follow-up inspections; and escalating enforcement and legal actions if the discharge is not eliminated.

Compliance with this provision will be achieved by initiating an investigation within 21 days of a report or discovery of a suspected illicit connection to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection. Upon confirmation of the illicit nature of a storm drain connection, termination of the connection will be verified within 180 days, using enforcement authority as needed.

D. Public Information:

The City will inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

1. No later than August 16, 2011, the City will distribute appropriate information to target audiences identified pursuant to Section 1.
2. No later than February 16, 2009, the City will publicly list and publicize a hotline or other local telephone number for public reporting of spills and other illicit discharges. The City will keep a record of calls received and follow-up actions taken in accordance with Section 3.C.2. through 5. above; and will include a summary in the annual report in accordance with Section S9 of the City's Permit, *Reporting and Record Keeping Requirements*.

E. Program Evaluation and Assessment:

The City will adopt and implement procedures for program evaluation and assessment, including tracking the number and type of spills or illicit discharges identified; inspections made; and any feedback received from public education efforts. A summary of this information will be included in

the City's annual report in accordance with Section S9 of the City's Permit, *Reporting and Recordkeeping Requirements*.

F. Training:

The City will provide appropriate training for municipal field staff on the identification and reporting of illicit discharges into MS4s.

1. No later than August 16, 2009, the City will ensure that all municipal field staff who are responsible for identification, investigation, termination, cleanup, and reporting illicit discharges, including spills, improper disposal and illicit connections are trained to conduct these activities. Follow-up training will be provided as needed to address changes in procedures, techniques or requirements. The City will document and maintain records of the training provided and the staff trained.
2. No later than February 16, 2010, an ongoing training program will be developed and implemented for all municipal field staff, which, as part of their normal job responsibilities, might come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system will be trained on the identification of an illicit discharge/connection, and on the proper procedures for reporting and responding to the illicit discharge/connection. Follow-up training will be provided as needed to address changes in procedures, techniques or requirements. The City will document and maintain records of the training provided and the staff trained.

Section 4: Controlling Runoff from New Development, Redevelopment and Construction Sites

The City has in place and enforces a program to reduce pollutants in stormwater runoff to its MS4 from new development, redevelopment and construction site activities. The City has adopted the Stormwater Management Manual for Western Washington by the Department of Ecology. This manual meets or exceeds the thresholds identified in appendix 1.

The City will take the following minimum measures:

A. Ordinance:

The City has adopted and enforces the Stormwater Management Manual for Western Washington created by the Department of Ecology throughout the permit process. The manual includes:

1. The Western Washington Stormwater Management Manual includes the following minimum requirement topics for new development, redevelopment and construction sites: Mark clearing limits, establish construction access, control flow rates, install sediment controls, stabilize soils, protect slopes, protect drain inlets, stabilize

channels and outlets, control pollutants, control de-watering, maintain BMP's, and manage the project. More information on each minimum requirement can be found in the Western Washington Stormwater Management Manual.

2. A site planning process and BMP selection and design criteria that, when used to implement the minimum requirements in Appendix 1 of the City's Permit (or equivalent approved by Ecology under the Phase I Permit) will protect water quality, reduce the discharge of pollutants to the maximum extent practicable and satisfy the State requirement under Chapter 90.48 RCW to apply all known, available and reasonable methods of prevention, control and treatment (AKART) prior to discharge. The City will document how the criteria and requirements will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy State AKART requirements.

The City chooses to use the site planning process and BMP selection and design criteria in the 2005 *Stormwater Management Manual for Western Washington*, the City may cite this choice as its sole documentation to meet this requirement.

3. The legal authority, through the approval process for new development, to inspect private stormwater facilities that discharge to the City's MS4.
4. Provisions to allow non-structural preventive actions and source reduction approaches such as Low Impact Development Techniques (LID), measures to minimize the creation of impervious surfaces and measures to minimize the disturbance of native soils and vegetation. Provisions for LID should take into account site conditions, access and long term maintenance.
5. If the City chooses to allow construction sites to apply the "Erosivity Waiver" in Appendix 1 of the City's Permit, Minimum Requirement #2, the ordinance or regulatory mechanism will include appropriate, escalating enforcement sanctions for construction sites that provide notice to the City of their intention to apply the waiver but do not meet the requirements (including timeframe restrictions, limits on activities that result in non-stormwater discharges, and implementation of appropriate BMPs to prevent violations of water quality standards) to qualify for the waiver.

B. Permitting Process:

The City has a permitting process with plan review, inspection and enforcement capability to meet the standards listed in 1 through 4 below, for both private and public projects, using qualified personnel. This process is applied to all development resulting in 500 square feet or more of new impervious surface on previously undeveloped or developed property.

1. The City has contracted with a consulting engineering firm that works with the Public Works Department and reviews all stormwater site plans for proposed development/redevelopment activities.
2. The Public Works Department inspects, prior to clearing and construction, all known development sites that have high potential for sediment transport.
3. The Public Works Department inspects all known permitted development sites during construction to verify proper instillation and maintenance of required erosion and sediment controls. The City enforces when necessary based on inspection.
4. The Public Works Department inspects all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater controls such as stormwater facilities and structural BMP's. A maintenance plan is completed and responsibility for maintenance is assigned. The City enforces when necessary based on inspection.
5. Compliance with the inspection requirements in 2., 3. and 4. above will be determined by the presence and records of an established inspection program designed to inspect all sites and achieving at least 95% of scheduled inspections.
6. The Public Works Department has an enforcement strategy developed and implemented to respond to issues of non-compliance.
7. If the City chooses to allow construction sites to apply the "Erosivity Waiver" in Appendix 1 of the City's Permit, Minimum Requirement #2, the City is not required to review the construction stormwater pollution prevention plans as part of the site plan review in 1. above, and is not required to perform the construction phase inspections identified in 2. and 3. above related to construction sites which are eligible for the erosivity waiver.

C. Long-term Operation and Maintenance:

The program will include provisions to verify adequate long-term operation and maintenance (O&M) of post-construction stormwater facilities and BMPs

that are permitted and constructed pursuant to (B) above. These provisions will be in place no later than August 16, 2009 and will include:

2. The City has adopted the *Stormwater Management Manual for Western Washington* for the City of Brier Surface Water Management plan. Maintenance standards can be found in volume V chapter 4.
 - a. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facilities required condition at all times between inspections. Exceeding the maintenance standard between the period of inspections is not a Permit violation.
 - b. Unless there are circumstances beyond the City's control, when an inspection identifies an exceedance of the maintenance standard, maintenance will be performed:
 - Within 1 year for wet pool facilities and retention/detention ponds.
 - Within 6 months for typical maintenance.
 - Within 9 months for maintenance requiring re-vegetation.
 - Within 2 years for maintenance that requires capital construction of less than \$25,000.

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

3. Annual inspections of all stormwater treatment and flow control facilities (other than catch basins) permitted by the City according to Section 4.B. unless there are maintenance records to justify a different frequency.

Reducing the inspection frequency will be based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the City may substitute written statements to document a specific less frequent inspection schedule. Written statements will be based on actual inspection and maintenance experience and will be certified in accordance with G19 of the City's Permit, *Certification and Signature*.

4. Inspections of all new flow control and water quality treatment facilities, including catch basins, for new residential developments that are a part of a larger common plan of development or sale, every 6 months during the period of heaviest house construction (i.e., 1 to 2

years following subdivision approval) to identify maintenance needs and enforce compliance with maintenance standards as needed.

D. Record Keeping:

The City Surface Water Management Program has in place a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and activities are maintained. The City inspects and keeps records of all new developed property.

E. Availability of NOIs:

The City will make available copies of the "Notice of Intent for Construction Activity" and copies of the "Notice of Intent for Industrial Activity" to representatives of proposed new development and redevelopment. The City will continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.

F. Training:

No later than August 16, 2009, the City will verify that all staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Follow-up training will be provided as needed to address changes in procedures, techniques or staffing. The City will document and maintain records of the training provided and the staff trained.

Section 5: Pollution Prevention and Operation and Maintenance for Municipal Operations

By February 16, 2010, the City will develop and implement an operations and maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

The City will take the following minimum measures:

A. Maintenance Standards:

The City has adopted the 2005 *Stormwater Management Manual for Western Washington*. A set of standards is found in volume V chapter 4.

1. The City Public Works Department determines if maintenance is required upon inspection. Exceeding the maintenance standard between the period of inspections is not a violation.
2. Unless there are circumstances beyond the City's control, when an inspection identifies an exceedance of the maintenance standard, maintenance will be performed:

- Within 1 year for wet pool facilities and retention/detention ponds.
- Within 6 months for typical maintenance.
- Within 9 months for maintenance requiring re-vegetation.
- Within 2 years for maintenance that requires capital construction of less than \$25,000.

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

B. General Inspections:

The City Stormwater Technicians perform annual inspections of all stormwater treatment and flow control facilities that are City owned and operated and take appropriate maintenance actions in accordance with the adopted Stormwater Management Manual for Western Washington.

Reducing the inspection frequency will be based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the City may substitute written statements to document a specific less frequent inspection schedule. Written statements will be based on actual inspection and maintenance experience and will be certified in accordance with G19 of the City's Permit, *Certification and Signature*.

C. Post-Storm Inspections:

The City Surface Water Management Division performs spot checks of potentially damaged permanent treatment and flow control facilities after major storm events. If spot checks indicate widespread damage/maintenance needs, all facilities that may be affected are then inspected. Repairs and maintenance action is taken immediately upon inspection if required.

D. Catch Basins and Inlet Inspections:

Inspection of all catch basins and inlets owned or operated by the City at least once before the end of the City's Permit term. Clean catch basins if the inspection indicates cleaning is needed to comply with maintenance standards established in the 2005 *Stormwater Management Manual for Western Washington*. Decant water will be disposed of in accordance with Appendix 6 of the City's Permit, *Street Waste Disposal*.

Inspections may be conducted on a "circuit basis" whereby a sampling of catch basins and inlets within each circuit is inspected to identify maintenance

needs. Include in the sampling an inspection of the catch basin immediately upstream of any system outfall. Clean all catch basins within a given circuit at one time if the inspection sampling indicates cleaning is needed to comply with maintenance standards established under Section 4.C., above.

As an alternative to inspecting catch basins on a “circuit basis,” the City may inspect all catch basins, and clean only catch basins where cleaning is needed to comply with maintenance standards.

E. Compliance:

The City Surface Water Management Program has an established inspection program designed to inspect all sites.

F. Reduction of Stormwater Impacts:

The City Surface Water Management Program has established practices from the Stormwater Management Manual for Western Washington to reduce stormwater impacts associated with runoff from streets, parking lots, roads and highways resulting from the following maintenance activities:

- 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

G. Policies and Procedures:

The City Surface Water Management Program has established policies and best management practices from the Stormwater Management Manual for Western Washington to reduce pollutants in discharges resulting from the following activities

- Application of fertilizer, pesticides, and herbicides including the development of nutrient management and integrated pest management plans.
- Sediment and erosion control.
- Landscape maintenance and vegetation disposal.
- Trash management.
- Building exterior cleaning and maintenance.

H. Training:

Develop and implement an on-going training program for employees of the City whose construction, operations or maintenance job functions may impact stormwater quality. The training program will address the importance of protecting water quality, the requirements of the City's Permit, operation and maintenance standards, inspection procedures, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns, including potential illicit discharges. Follow-up training will be provided as needed to address changes in procedures, techniques or requirements. The City will document and maintain records of training provided.

I. Special Facility Requirements:

Development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the City in areas subject to the City's Permit that are not required to have coverage under the Industrial Stormwater General Permit. Implementation of non-structural BMPs will begin immediately after the pollution prevention plan is developed. A schedule for implementation of structural BMPs will be included in the SWPPP. Generic SWPPPs that can be applied at multiple sites may be used to comply with this requirement. The SWPPP will include periodic visual observation of discharges from the facility to evaluate the effectiveness of the BMP.

J. Record Keeping:

Records of inspections and maintenance or repair activities conducted by the City will be maintained in accordance with S9 of the City's Permit, *Reporting Requirements*.

Section 6. Program Reporting and Monitoring

- A. No later than March 31 of each year beginning in 2008, the City will submit an annual report to Ecology. The reporting period for the first annual report will be from February 16, 2007 through December 31, 2007. The reporting period for all subsequent annual reports will be the previous calendar year.
- B. Two printed copies and an electronic (PDF) copy of each document will be submitted to Ecology. All submittals will be delivered to:
 - Department of Ecology Water Quality Program Municipal Stormwater Permits P.O. Box 47696 Olympia, WA 98504-7696
- C. The City will keep all records related to the Permit and the SWMP for at least five years. Except for the requirements of the annual reports described in this permit, records will be submitted to Ecology only upon request,

- D. The City will make all records related to the Permit and the City's SWMP available to the public at reasonable times during business hours. The City will provide a copy of the most recent annual report to any individual or entity, upon request.
1. A reasonable charge may be assessed by the City for making photocopies of records.
 2. The City may require reasonable advance notice of intent to review records related to this Permit.
- E. Each annual report will include the following:
1. A copy of the City's current Stormwater Management Program documentation.
 2. Submittal of Appendix 3 – *Annual Report Form for Cities, Towns, and Counties*, of the Permit, which is intended to summarize the City's compliance with the conditions of the permit, including:
 - a. Status of implementation of each component of the SWMP in Sections 1 through 6,
 - b. An assessment of the City's progress in meeting the minimum measures in Sections 1-6,
 - c. A description of activities being implemented to comply with each component of the SWMP, including the number and type of inspections, enforcement actions, public education and involvement activities, and illicit discharges detected and eliminated.
 - d. The City's SWMP implementation schedule and plans for meeting Permit deadlines, and the status of SWMP implementation to date. If permit deadlines are not met, or may not be met in the future, the following will be included: reasons why, corrective steps taken and proposed, and expected dates that the deadlines will be met.
 - e. A summary of the City's evaluation of the City's SWMP, according to sections S5.A.4. and S8.B.2 of the Permit.
 - f. Notice, if applicable, that the City is relying on another governmental entity to satisfy any of the obligations under this permit.
 - g. Updated information from the prior annual report plus any new information received during the reporting period, pursuant to S8.B.2. of the Permit.
 - h. Certification and signature pursuant to G19.D of the Permit, and notification of any changes to authorization pursuant to G19.C.

3. Notification of any annexations, incorporations or jurisdictional boundary changes resulting in an increase or decrease in the City's geographic area during the reporting period, and implications for the SWMP.
4. A description of any stormwater monitoring or studies conducted by the City during the reporting period. If stormwater monitoring was conducted on behalf of the City, or if studies or investigations conducted by other entities were reported to the City, a brief description of the type of information gathered or received shall be included in the annual report(s) covering the time period(s) the information was received.
5. An assessment of the appropriateness of the BMPs identified by the City for each component of the SWMP; and any changes made, or anticipated to be made, to the BMPs that were previously selected to implement the SWMP, and why.

F. The City will prepare for future, long-term monitoring

1. The City will prepare to participate in the implementation of a comprehensive long-term monitoring program. The monitoring program will include two components: stormwater monitoring and targeted Stormwater Management Program (SWMP) effectiveness monitoring.
 - a. Stormwater monitoring will be intended to characterize stormwater runoff quantity and quality at a limited number of locations in a manner that allows analysis of loadings and changes in conditions over time, and generalization across the City.
 - b. Stormwater program effectiveness monitoring will be intended to improve stormwater management efforts by evaluating issues that significantly affect the success of, or confidence in, stormwater controls.

The monitoring program may include long-term monitoring and short-term studies. The results of the monitoring program will be used to support the adaptive management process and lead to refinements of the SWMP.

2. Stormwater monitoring
 - a. The City will identify three outfalls or conveyances where stormwater sampling could be conducted. One outfall or conveyance will represent commercial land use, the second will represent high-density residential land use and the third will represent industrial land use. The City of Brier does not have

any industrial land or high-density residential land and only a very small amount of commercial land use, but will identify three outfalls or conveyances where stormwater sampling could be conducted.

- b. The City will document how sites are selected and justify the basin size, based on comparison of the times of concentration with rainfall durations for typical seasonal storms. Each will represent a discernible type of land use, but not be a single industrial or commercial complex. Ideally, to represent a particular land use, no less than 80% of the area served by the outfall or conveyance will be classified as having that land use. The City may move upstream in the conveyance system to achieve the desired land use, or, if a primarily industrial or commercial area is not present, an area of mixed industrial and commercial land use may be selected.

3. SWMP effectiveness monitoring

- a. The City will prepare to conduct monitoring to determine the effectiveness of the City's SWMP at controlling stormwater-related problems that are directly addressed by actions in the City's SWMP. This component of the monitoring program shall be designed to answer the following types of questions:

How effective is a targeted action or narrow suite of actions?

Is the SWMP achieving a targeted environmental outcome?

- b. No later than December 31, 2010, the City will identify at least two suitable questions and select sites where monitoring will be conducted. This monitoring will include, at a minimum, plans for stormwater, sediment or receiving water monitoring of physical, chemical and/or biological characteristics. This monitoring may also include data collection and analysis of other measures of program effectiveness, problem identification and characterizing discharges for planning purposes.
- c. For each question, the City will develop a monitoring plan containing the following elements:
 - i. A statement of the question, an explanation of how and why the issue is significant to the Permittee, and a discussion of whether and how the results of the monitoring may be significant to other MS4s.
 - ii. A specific hypothesis about the issue or management actions that will be tested.
 - iii. Specific parameters or attributes to be measured.

- iv. Expected modifications to management actions depending on the outcome of hypothesis testing.
4. Monitoring program reporting requirements
- a. The 2011 annual report will:
 - i. Describe the status of identification of sites for stormwater monitoring.
 - ii. Include a summary of proposed questions for the SWMP effectiveness monitoring and describe the status of developing the monitoring plan, including the proposed purpose, design, and methods.

Section 7. Compliance with Total Maximum Daily Load Requirements/Bacterial Pollution Control Plan

This section constitutes the City's Bacterial Pollution Control Plan (BPCP), and has been developed to meet the requirements of applicable Total Maximum Daily Loads (TMDLs) approved for stormwater discharges from MS4s owned or operated by the City.

Applicable TMDLs are TMDLs which were approved by EPA on or before the issuance of the permit and are included in appendix 2 of the permit.

There is one TMDL listed in Appendix 2 of the Permit that is applicable within the City of Brier. It is the Swamp Creek TMDL. The Swamp Creek TMDL addresses fecal coliform bacteria in Swamp Creek. The coverage of this TMDL includes all areas of the City that eventually drain to Swamp Creek prior to its confluence with the Sammamish River in King County.

The City will take the following measures to comply with the applicable TMDLs:

- A. the City will evaluate and document the applicability of the following approaches to bacterial pollution control:
 - 1. Ambient water quality and stormwater quality sampling to specifically identify bacterial pollution sources within targeted sub-basins.
 - 2. Development and implementation of a Pet Waste Ordinance or other equivalent mechanism.

3. Evaluation of current water pollution ordinance enforcement capabilities.
4. Evaluation of critical areas ordinance in relation to TMDL goals.
5. Implementation of an educational program directed at reducing bacterial pollution, including an educational program for K-12 students to increase their awareness of bacterial pollution problems.
6. Investigation and implementation of methods that prevent additional stormwater bacterial pollution through stormwater treatment, reducing stormwater volumes from existing areas using low impact development retrofitting, and preventing additional sources of stormwater in association with new development using low impact development strategies.

B. The City will conduct additional Illicit Discharge Detection and Elimination (IDD&E) activities within the areas of the City affected by the TMDL:

1. There are no commercial animal handling areas or commercial composting facilities.
2. There are no known composting or animal waste handling facilities within the city.
3. Water bodies addressed by the Swamp Creek Tributaries TMDLs will be designated as high priority water bodies (see permit condition S.5.C.3.(c)(ii)) and will receive field assessments and screening prior to other receiving water bodies unless approved in writing from Ecology. The presence of sewage/septic system sources shall be investigated as part of all screenings.

C. The City will conduct water quality monitoring for fecal contamination:

Within the area covered by the Swamp Creek TMDL, the City will perform water quality monitoring in accordance with Option 2 of the Swamp Creek TMDL

The City is in the process of preparing the Quality Assurance Project Plan (QAPP) for the above monitoring to submit to Ecology on for review. The QAPP was prepared following Ecology's "Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies, Ecology Publication No. 01-03-003. Water quality monitoring will begin once the project plan is approved by ecology in accordance with the QAPP.

Monitoring will be performed at a frequency that will produce at least 60 data points at each sampling location by February 15, 2012. The City will also use continuous flow monitoring at a representative location as approved by Ecology, to determine if a sampling event is affected, or dominated, by storm flows.

- D. The City will conduct TMDL Activity Documentation and Tracking. The City will keep records of all actions required by the Permit for TMDL compliance. The City will discuss implementation status, program changes and BPCP activities completed during the previous year in a subsection of the City's annual report to Ecology.