

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 gathers, tracks, maintains and uses information on an on-going basis to evaluate the SWMP development, implementation, Permit compliance, and to set priorities. The City is in the process of developing a program 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 includes 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 has been developed locally, regionally, and coordinated with the Snohomish County Conservation District.

The City has taken the following measures:

- A. Education and Outreach Program:

The City has developed an education and outreach program for the area served by its Municipal Separate Storm Sewer System (MS4). The outreach program was 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 have been prioritized to target the following audiences and subject areas:

1. General public

The Plan includes the following:

- A poster describing general impacts of stormwater flows into surface waters is available.
- A door hanger describing impacts from impervious surfaces is available.
- Posters for responsible automotive care including disposal of chemicals are available.
- Newsletters that include information on the SWMP are periodically distributed to all City residents.

2. General public, businesses, including home-based and mobile businesses

The Plan includes the following:

- 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.
- Newsletters that include information on the SWMP are periodically distributed to all City businesses.

3. Homeowners, landscapers and property managers

The Plan includes the following:

- A poster profiling yard care techniques protective of water quality is available.
- Offer natural yard care and stream side landowner workshops coordinated with Snohomish County, a Phase I municipality.
- A brochure detailing BMPs for use and storage of pesticides and fertilizers is available.
- A brochure detailing BMPs for auto repair and maintenance are available.
- 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.

4. Engineers, contractors, developers, review staff and land use planners

The Plan includes the following:

- A Surface Water Management Program was 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.

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 is in the process of developing a program to 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 public review of the SWMP will not be complete prior to submittal to The Department of Ecology for the annual report.

The City will take the following minimum measures:

A. Opportunities for Public Participation:

The City has made the SWMP available for public comment on the City's website. The City is also interested in environmental activities including the Adopt-A-Stream Program where citizens monitor streams. The City would also arranged 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 has made 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, is 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 available at City hall. The map shows locations of city 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 has mapped the attributes listed below for all storm sewer outfalls:
 - Tributary conveyances (indicate type, material, and size where known).
 - Associated drainage areas.
 - Land use.
2. As part of the building permitting process, the City initiated a program that developed and maintains 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. Maps will be made to the public upon request.

B. IDD&E Ordinance:

The City has developed an ordinance to 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..

1. The regulatory mechanism does not 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 prohibits 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 includes a training program for public works employees to help educate workers on how to spot and report illicit discharges.
 6. The City has developed an enforcement strategy and implemented the enforcement provisions of the ordinance or other regulatory mechanism.

C. Ongoing IDD&E Program:

The City is currently working with public works staff on developing a 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, 2011. 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. A program that establishes procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the City is being developed using the *“Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments”* from the Center for Watershed Protection as a guide.. 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. A program that establishes procedures to trace 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 is being developed using the *“Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments”* from the Center for Watershed Protection as a guide.
5. A program that establishes 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 is being developed using the *“Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments”* from the Center for Watershed Protection as a guide.

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 is currently coordinating with neighboring Phase I and Phase II jurisdictions to implement an education program to educate 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. The City has added a hotline connected to the City's automated answering system 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 has implemented 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 is 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 provides appropriate training for municipal field staff on the identification and reporting of illicit discharges into MS4s.

1. The City provides training in monthly safety meetings to 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 is also provided as needed to address changes in procedures, techniques or requirements. The City documents and maintains records of the training provided and the staff trained.
2. An ongoing training program has been developed and implemented at monthly safety meetings 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. The staff is 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 is provided as needed to address changes in procedures, techniques or requirements. The City documents and maintains 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 but and is currently adding additional language to strengthen the code. 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.

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. The City is revising the language of the municipal code to comply with the NPDES regulations. 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. The City is in the process of adopting Appendix 7 of the Western Washington Phase II Municipal Stormwater Permit, Determining Construction Site Sediment Potential, to the review process.
3. The Public Works Department inspects all known permitted development sites during construction to verify proper installation 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. A tracking system is being implemented to track proper installation of permanent stormwater controls.
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. Currently the City has a program in place where construction is halted or final project approval is not granted in instances of non-compliance with regulations.

C. Long-term Operation and Maintenance:

The City has adopted the *Stormwater Management Manual for Western Washington* in order to provide 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 include:

1. The City is in the process of implementing new ordinances that clearly identifies the party responsible for maintenance, requires inspection of facilities and establishes enforcement procedures.
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.

All new flow control and water quality treatment facilities, including catch basins, are inspected to identify maintenance needs and enforce compliance with maintenance standards as needed.

D. Record Keeping:

The City's 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.

E. Availability of NOIs:

The City makes 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:

Consulting City Engineer responsible for permitting and plan review are trained in the use of the *Stormwater Management Manual for Western Washington* and hydrological modeling. The City has implemented a training program for all staff responsible for inspecting stormwater systems for new development, redevelopment, and construction sites, and those responsible for enforcement actions. Follow-up training is provided as needed to address changes in procedures, techniques or staffing. The City documents and maintains records of the training provided and the staff trained.

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

The City has developed and implemented 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. This O&M program can be found in the comprehensive stormwater plan as well as in the Stormwater Pollution Prevention Plan.

The City has taken the following 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. An inspection program is being developed to schedule inspections and record the findings from said inspections.
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 Public Works crews 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. An inspection program is being developed to schedule inspections and record the findings from said inspections.

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 (defined as greater than 24-hour-10-year recurrence

interval rainfall). 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. Cleaning of catch basins is performed if the inspection indicates that it is needed to comply with maintenance standards established in the 2005 *Stormwater Management Manual for Western Washington*. Decant water is 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:

A training program has been developed for employees of the City whose construction, operations or maintenance job functions may impact stormwater quality. The training program addresses 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:

A Stormwater Pollution Prevention Plan (SWPPP) has been created for the City's Public Works Yard. Implementation of non-structural BMPs will begin immediately after the pollution prevention plan is developed. Implementation of structural BMPs has begun. A schedule for implementation of structural BMPs is included in the SWMPP. 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 are 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 all annual reports will be the previous calendar year.
- B. 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 coli form 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 have been 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 Quality Assurance Project Plan (QAPP) was approved by Ecology on February 28th, 2008 and final signed copies were delivered to Mountlake Terrace and Brier in March 2008. Monthly sampling began on April 15th, 2008 and has continued to the present.

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 conducts TMDL activity documentation and tracking. The City keeps 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.