

City of Bellingham Stormwater Management Program (SWMP)



The City of Bellingham is soliciting comments regarding the Stormwater Management Program (SWMP) provided here. Comments may be sent to the Department of Public Works, 210 Lottie Street, Bellingham 98225 Attn, Bill Reilly **or** they may be sent by e-mail to wreilly@cob.org, please include in the subject line "SWMP Comments". Comments must be received Friday June 20, 2008 to be considered. All comments will be brought to and reviewed by the Public Works Advisory Board. The Board will consider the comments for inclusion along with other recommendations they may have for potential changes to the SWMP.

City of Bellingham Stormwater Management Program (SWMP)

March 2008 Version
Prepared by
William M. Reilly
Storm and Surface Water Manager

Foreword

This program document has been created to meet the requirements of the Western Washington Phase II Municipal Stormwater Permit (WAR04-5550). This Stormwater Management Plan (SWMP) is prepared to demonstrate the City's understanding of and commitment to fully meeting the regulatory requirements of this permit. The SWMP is a dynamic document that will be updated on an annual basis and will be integral to our permit compliance.

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This Stormwater Management Plan (SWMP) has been constructed to provide information on how the City of Bellingham has met or will meet the requirements of the Western Washington Phase II Municipal Stormwater Permit. References to this document will be called out as the “Permit”.

References to activities related to the minimum requirements that have partially or completely met the goals of the requirement are shown in bold with a 2007 date. The 2007 date may actually indicate items that took place in prior years.

1. Public Education and Outreach

The City of Bellingham SWMP will include an education program aimed at residents, businesses, industries, 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. Our education program is being developed locally but we are open to sharing this effort with other primary and secondary permittees. Our education program has or will consist of:

- a. The City will provide or will have provided an education and outreach program for our stormwater service area by February 16, 2009. The outreach program will be designed to achieve measurable improvements (to the degree possible) 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:

- i. General public

- General impacts of stormwater flows into surface waters.
- Impacts from impervious surfaces.
- Source control BMPs and environmental stewardship actions and opportunities in the areas of pet waste, vehicle maintenance, landscaping and buffers.

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

- BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.
- Impacts of illicit discharges and how to report them.

- iii. Homeowners, landscapers and property managers

- Yard care techniques protective of water quality.
- BMPs for use and storage of pesticides and fertilizers.
- BMPs for carpet cleaning and auto repair and maintenance.
- Low Impact Development techniques, including site design, pervious paving, retention of forests and mature trees.
- Stormwater pond maintenance.

- iv. Engineers, contractors, developers, review staff and land use planners

- Technical standards for stormwater site and erosion control plans.
- Low Impact Development techniques, including site design, pervious paving, retention of forests and mature trees.
- Stormwater treatment and flow control BMPs.

b. The City will endeavor to measure the understanding and adoption of the targeted behaviors among the targeted audiences. Measurement results that are obtained and deemed valid, will be used to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors.

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

2007-

The City of Bellingham has a robust education and outreach program. The City has provided education to the general public and targeted groups at the general rate of 2-3 subjects per year. Educational subjects that have been addressed by, for or in conjunction with the City include but are not limited to:

Low Impact Development

LEED Develop

Construction Stormwater Management

Concrete Waste Disposal

Pet Waste

Pressure Washing

Car Washing

Spill Control

Phosphorus Education – Lake Whatcom

Stormwater Education Program – 4th and 5th grades

Grass Clippings Disposal

Coordination with WSU and County for Yard Care Education

2. Public Involvement and Participation

The City will provide opportunities for public involvement through Council processes, the Public Works Advisory Board, neighborhood and watershed committees, stewardship programs and planned environmental activities. The City will comply with applicable State and local public notice requirements as necessary for developing this SWMP.

In addition the City will provide the following:

On an annual basis, beginning in 2008, the City will at a minimum post the Stormwater Management Plan (SWMP) required by the Municipal Phase II permit and the annual report to the Department of Ecology on our website. The posting should be provided by April 30th of each year. The public will be invited to review and provide comments in writing regarding the SWMP. The Stormwater Manager of the City of Bellingham will record and compile all comments. By June 30th of each year, the Public Works Advisory Board for the City of Bellingham will convene to review the existing SWMP and all public comments offered regarding the SWMP. The Public Works Advisory Committee will make a recommendation to the Public Works Director on any needed or proposed changes to the SWMP. Minor changes to the SWMP may be approved administratively. Major changes that would require a code modification will be handled through public process.

2007-

The City of Bellingham updated our stormwater code in May of 2006 to largely include the requirements of the 2005 Ecology Manual. A public process was utilized for that work including three workshops regarding the changes, one for builders and contractors, one for engineers and architects and one for the general public. The code change was reviewed by the Public Works Advisory Board and finally reviewed and approved through public process with our Council.

The City has customarily provided 1-2 forums per year for the public or targeted groups to receive information regarding stormwater management and provide comments accordingly.

3. Illicit Discharge Detection and Elimination

The City of Bellingham has or will have 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 implement an ongoing illicit discharge detection and elimination program that meets the requirements of the Phase II permit by August 15, 2011.

At a minimum the City will provide or has provided:

- a. A municipal storm sewer system map or mapping system that will be periodically updated and will include the following information:
 - i. The location of all known municipal separate storm sewer outfalls and their receiving waters. The location of all known structural stormwater BMPs owned, operated, or maintained by the City. The map or mapping system will include at a minimum all storm sewer outfalls with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. Map attributes will include:
 - Tributary conveyances (type, material, and size when known).
 - Associated drainage areas.
 - Land use.
 - ii. The City has or will have an ongoing program to map all connections to the Bellingham municipal separate storm sewer authorized or allowed by the City after February 15, 2007.
 - iii. The City will map any known geographic areas that are served by our municipal separate stormwater system but that do not contribute to the discharge of stormwater to surface waters.
 - iv. The City will make available to Ecology, upon request, municipal storm sewer system map(s) depicting the aforementioned information. The City will attempt to provide mapping in a format preferred by the Department of Ecology.
 - vi. Upon request, the City will provide mapping information to co-permittees and secondary permittees.

2007-

The City of Bellingham currently has a GIS mapping system that includes a stormwater coverage. The City's mapping is continually being updated and records are being refined. It is probable, at this time, that we have met the requirement for mapping all systems 24 inch and larger and all municipally owned stormwater facilities. It may be possible though, that there are some map deficiencies in the southerly portion of the City. If so these deficiencies will be addressed prior to 2011.

- b. Bellingham Municipal Code 15.42.020.U and 15.42.050.C, effectively prohibits non-stormwater, illegal discharges, and/or dumping into the City's municipal separate storm sewer system to the extent allowable under State and Federal law. This requirement was first adopted in September 1995 and was reiterated in our most recent code update in

May of 2006. Necessary amendments to this code brought to the City's attention will be adopted by August 15, 2009 or within one year of an Ecology request to do so, whichever will be the longer term.

i. The City understands that we do not need to regulate 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 NPDES permit.
- Discharges from emergency fire fighting activities in accordance with permit condition *S2 Authorized Discharges*.

ii. Our regulatory mechanisms prohibit the following categories of non-stormwater discharges that do not meet the stated conditions:

- Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges will be 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. These will be minimized through, at a minimum, public education activities (see section S5.C.1) and water conservation efforts.
- Dechlorinated swimming pool discharges. Any discharges that may be allowed will be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted and reoxygenized if necessary. Discharge volume and velocity should normally be a condition of any permitted discharge in order to prevent scour or re-suspension of sediments in City stormwater conveyances. Swimming pool cleaning wastewater and filter backwash should not be permitted into any municipal stormwater system.
- Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The City will attempt to minimize these discharges through, public education activities, water conservation efforts and/or code enforcement. For City operations,

we will minimize, to the extent practicable, the amount of street wash and dust control water used. At active construction sites, BMC15.42.060.F.2.e.ii(d) requires that street sweeping must be performed prior to the washing of any street.

- Stormwater discharges associated with construction, including de-watering practices, are regulated and enforced per BMC15.42.

iii. The City will further address any category of discharges in i or ii above if the discharges are identified as significant sources of pollutants to waters of the State.

iv. The enforcement of all stormwater code provisions including illicit discharges is provided for in BMC 15.42 subsections 070-110.

2007-

The City of Bellingham is active in the enforcement of non-stormwater discharges. Bellingham Public Works and Fire personnel have been instructed on the need to prevent potable water discharges to stormwater systems. City project specifications and conditions indicate the need to prevent non stormwater discharges and violations of this issue can be enforced through existing regulations.

c. The City has developed or will develop and implement a program to detect and address non-stormwater discharges, spills, illicit connections and illegal dumping into our municipal separate storm sewer system. The program has been substantially developed but any elements necessary to our permit compliance will be provided by August 15, 2011. The City plan has or will include:

i. 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.

ii. Field assessment activities, including visual inspection of priority outfalls identified in i, above, during dry weather and for the purposes of verifying outfall locations, identifying previously unknown outfalls, and detecting illicit discharges.

- Receiving waters have been or will be prioritized for visual inspection no later than February 15, 2010. The City has or will have conducted field assessments of three high priority water bodies by February 15, 2011. Field assessments on at least one high priority water body 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.

iii. 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 be enacted to determine when a discharge must be immediately contained and the steps necessary for that containment.

The City will demonstrate compliance by working toward the goal of 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. The City also sets a goal of investigating (or referring) problems and violations determined to be emergencies or otherwise judged to be urgent or severe as soon as is practicable.

iv. The City has or will put in place 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 methods that are deemed practicable.

v. The City has or will have 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.

The City will show compliance by setting the goal of 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 provided as soon as possible with the goal of doing so within 180 days. The use of enforcement authority will be used to the extent needed and to the degree possible under City, State and Federal laws.

2007-

The City has made procedural changes over the years to be more responsive to spills and illicit discharge reports. The greatest issue for us may be in the record keeping associated with these conditions.

d. The City has provided or will provide information on the hazards of illicit discharges and improper waste disposal to public employees, businesses, and the general public within the following schedule.

i. No later than August 15, 2011, the City will distribute appropriate information to target audiences identified in the Public Education and Outreach section of this SWMP.

ii. No later than February 15, 2010, the City will provide the following:

- Publicly list and publicize a hotline or other local telephone number for public reporting of spills and other illicit discharges.
- Maintain a record of calls received and follow-up actions as is indicated in S5.C.3.c.ii. through v. above.
- Include a summary of calls in the annual report in accordance with section S9 (Reporting and Record Keeping Requirements) of the permit.

e. The City will evaluate and assess the IDE program as determined necessary for compliance. This will include tracking the number and type of spills or illicit discharges identified; inspections made; and any feedback received from public education efforts. A

summary of relevant information will be included our annual report in accordance with section S9 (Reporting and Recordkeeping Requirements) of the permit.

f. The City has provided or will provide appropriate training for municipal field staff on the identification and reporting of illicit discharges into MS4s according to the following schedule:

i. No later than August 15, 2009, the City will have provided training for all municipal field staff who are responsible for identification, investigation, termination, cleanup, and reporting illicit discharges, including spills, improper disposal and illicit connections. 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.

ii. No later than February 15, 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. Staff 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.

2007-

The City of Bellingham has been fairly active in the area of illicit discharges. Since 2004 the City has provided an annual dry weather monitoring program that looks at a minimum of one major drainage basin per year. The City has reviewed and collected data on the following streams.

Lake Whatcom and Silver Beach Creek, 2004

Whatcom Creek and Tributaries, 2004

Padden Creek and Tributaries, 2005

Squalicum Creek and Tributaries, 2006

Whatcom Creek and Tributaries, 2007 repeat in conjunction with TMDL work

Silver Creek Watershed, Bear Creek and Tributaries, planned for 2008

Chuckanut Creek and Tributaries, planned for 2008

Bellingham Bay, planned for 2009-2010

In addition, the City obtained equipment and have begun the process of scanning all stormwater lines in the City for the purpose of proper maintenance and to find Illicit Discharges.

4. Controlling Runoff from New Development, Redevelopment and Construction Sites

The City of Bellingham presently has or will have a program to reduce pollutants in stormwater runoff to our municipal stormwater system from new development, redevelopment and construction site activities. This program has or will be applied to all sites that disturb a land area 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale. The program will apply to private and public development, including roads. The “Technical Thresholds” in Appendix 1 will be applied to all sites 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale.

The minimum performance measures are:

a. The program does or will include an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects. Pursuant to the Permit condition contained in S5.A.4 if a new ordinance is necessary for the City to adopt to meet the requirements of the Permit, the City, at this time, has no plans to extinguish existing code requirements that are more protective of stormwater than permit condition S5.C.4. However, any required revisions to our code or any monitoring or reporting element required by the Permit may only apply to sites that disturb a land area 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale. Also, should it be found that condition S5.A.2 of the Phase II Permit is removed or deemed invalid, the City reserves the ability to update and/or remove current code sections. Any code changes necessary to be compliant with the Phase II permit, as currently written, will be adopted by August 15, 2009 and will include at a minimum:

i. The Minimum Requirements, technical thresholds, and definitions in Appendix 1 or an equivalent approved by Ecology under the NPDES Phase I Municipal Stormwater Permit, for new development, redevelopment, and construction sites. Adjustment and variance criteria equivalent to those in Appendix 1 will be included. More stringent requirements may be used, and/or certain requirements may be tailored to local circumstances through the use of basin plans or other similar water quality and quantity planning efforts. Such local requirements will provide equal protection of receiving waters and equal levels of pollutant control to those provided in Appendix 1 of the Phase II Permit.

2007-

The minimum requirements of the 2005 Stormwater Management Manual for Western Washington manual, with some changes, were adopted by ordinance on May 16, 2006. The City will examine this code and will make changes found necessary for compliance with the Permit.

The City of Bellingham has previously and will again make the applicable ordinances or Bellingham Municipal Code (BMC) 15.42 available to the Department of Ecology. The City of Bellingham requests a determination by Ecology that our code is compliant with the terms of the Phase II municipal permit.

ii. A site planning process and BMP selection and design criteria that, when used to implement the minimum requirements in Appendix 1 (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. Permittees 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.

2007-

The City of Bellingham has chosen to use the site planning process and BMP selection and design criteria in the 2005 Stormwater Management Manual for Western Washington. The Manual was adopted by reference into BMC 15.42 on May 16, 2006.

iii. The legal authority, through the approval process for new development, to inspect private stormwater facilities that discharge to the City's municipal stormwater systems.

2007-

The City previous and current stormwater code provides the ability to enter onto properties for the purposes of inspecting stormwater facilities.

iv. 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.

2007-

BMC 15.42. includes the adoption of the 2005 Low Impact Development Technical Manual for Puget Sound to be used in concert with the 2005 DOE manual. Further, the City has adopted financial incentives for the use of Low Impact Development strategies.

v. If the City allows construction sites to apply the "Erosivity Waiver" in Appendix 1, Minimum Requirement #2 of the Permit, the City will administer its existing stormwater code (or provide code revisions if determined necessary) to provide 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. Code conditions and/or code changes will include (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. The program will include a permitting process with plan review, inspection and enforcement capability to meet the standards listed in (i) through (iv) below, for both private and public projects, using qualified personnel (as defined in Definitions and Acronyms section of the Phase II Permit). At a minimum, this program has been or will be applied to all sites that disturb a land area 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale. The process will be fully in place no later than August 15, 2009.

i. Except as provided in S5.C.4.b.vii below, review of all stormwater site plans for proposed development activities.

ii. Except as provided in S5.C.4.b.vii. below, inspect, prior to clearing and construction, all known development sites that have a high potential for sediment

transport as determined through plan review based on definitions and requirements in Appendix 7 Identifying Construction Site Sediment Transport Potential.

iii. Except as provided in S5.C.4.b.vii below, inspect all known permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection.

iv. Inspect 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 BMPs. Also, verify a maintenance plan is completed and responsibility for maintenance is assigned. Enforce as necessary based on the inspection.

v. Compliance with the inspection requirements in (ii), (iii) and (iv) 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.

vi. An enforcement strategy will be developed and implemented to respond to issues of non-compliance.

vii. If the City chooses to allow construction sites to apply the “Erosivity Waiver” provided for in Appendix 1, Minimum Requirement #2 of the Phase II Permit, the City is not required to review the construction stormwater pollution prevention plans as part of the site plan review in (i) above, and is not required to perform the construction phase inspections identified in (ii) and (iii) above related to construction sites which are eligible for the erosivity waiver.

2007-

The City of Bellingham considers itself in compliance with the permitting, inspection and enforcement elements of the Permit indicated above. BMC 15.42 contains the requisite elements to meet this requirement. The City has had in place a permitting, inspection and enforcement program since 1995. The City will provide for this element at its current level for all sites. Any inspection, reporting or compliance requirements that are greater than those specified by our existing code may only be provided for sites greater than the one acre threshold required by the Permit.

c. The City of Bellingham will provide stormwater operational procedures 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. At a minimum, this program has been or will be applied to all sites constructed after February 16, 2007 that disturb a land area 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale. These provisions will in place by August 15, 2009 and will include:

i. Existing or new stormwater code elements, and/or written policies and procedures, that clearly identifies the party responsible for maintenance, requires inspection of facilities in accordance with the requirements in (ii) through (iv) below, and establishes enforcement procedures.

ii. The City has established or will establish maintenance standards that are as protective or more protective of facility function than those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington. For facilities which do not have maintenance standards, the City will develop or require to be developed a maintenance standard.

(1) 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.

(2) Unless there are circumstances beyond the City's control, when an inspection identifies that a facility, meeting the criteria of c above, is in exceedence of the maintenance standard, maintenance will be performed according to the following schedule:

- 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, and
- 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. When maintenance timeframes are exceeded for facilities covered under this permit, the City will document the circumstances and how they were beyond our control.

iii. The City will provide annual inspections of all stormwater treatment and flow control facilities (other than catch basins and those facilities not covered by the Permit) permitted by the City according to S5.C.4.b. unless there are maintenance records to justify a different frequency.

Reducing the inspection frequency shall 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 shall be based on actual inspection and maintenance experience and shall be certified in accordance with condition G19 of the Permit Certification and Signature.

iv. The City will provide 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.

2007-

The City has a very good program for maintenance of City owned facilities. The City also has a policy of accepting stormwater management systems that are constructed as a part of a residential subdivision that would have a mix of private and public stormwater discharges. Stormwater detention and water quality systems are captured in a maintenance management system and are programmed for inspection and maintenance management. The maintenance section of the Stormwater Utility is additionally provided with system drawings and any written procedures for use during maintenance.

d. The program will include a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records pertinent to the requirements of the Permit. Records of maintenance inspections and maintenance activities for facilities governed by the Permit will be maintained. The City will keep records of all projects disturbing more than one acre, and all projects of any size that are part of a common plan of development or sale that is greater than one acre that are approved after the effective date of this Permit. The record retention period will at minimum meet the requirements of the State.

e. The City has and will continue to 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 also continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.

f. By August 15, 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.

2007-

Stormwater maintenance for private facilities is not as far along as the public sector. The City has to date kept a record of private facilities but the City has lacked the ability to enact a private inspection program. The City at this time can commit only to the goal of inspecting all private facilities that were constructed after the effective date of the Permit. Full compliance will be further limited to only those facilities that were constructed as part of a one acre or larger development or common development plan.

5. Pollution Prevention and Operation and Maintenance for Municipal Operations

By February 15, 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 minimum performance measures are:

a. The City will establish maintenance standards that are, as protective, or more protective, of facility function than those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington. For facilities which do not have maintenance standards, the City will develop a maintenance standard.

i. 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 inspections and/or maintenance is not a permit violation.

ii. Unless there are circumstances beyond the City's control, when an inspection identifies an exceedence of the maintenance standard, maintenance will be performed according to the following schedule:

- 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 exceedence of the required timeframe, the City will document the circumstances and how they were beyond their control.

b. The City will provide annual inspections of all municipally owned or operated permanent stormwater treatment and flow control facilities, other than catch basins and any facility deemed to not be subject to the Permit, and will take appropriate maintenance actions in accordance with the adopted maintenance standards. The annual inspection requirement may be reduced based on inspection records.

Any reduction in inspection frequency will be based on maintenance records of double the length of time of the required inspection frequency of the Permit. In the absence of maintenance records, the City may substitute written statements to document a specific less frequent inspection schedule. The written statements will be based on actual

inspection and maintenance experience and will be certified in accordance with G19 *Certification and Signature*.

c. The City will provide spot checks of potentially damaged permanent treatment and flow control facilities (other than catch basins) after major (greater than 24-hour-10-year recurrence interval rainfall) storm events. If spot checks indicate widespread damage/maintenance needs, inspect all stormwater treatment and flow control facilities (required by the Permit), that may be affected. The City will conduct repairs or take appropriate maintenance action in accordance with established maintenance standards and based on the results of inspection.

d. Inspection of all catch basins and inlets owned or operated by the City will be occur at least once during the term of the Permit. Catch basins will at a minimum be cleaned as 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 Permit *Street Waste Disposal*.

The City may conduct inspections on a “circuit basis” whereby a sampling of catch basins and inlets within each circuit is inspected to identify maintenance needs. If this method is used we will include in the sampling an inspection of the catch basin immediately upstream of any system outfall. All catch basins within a circuit will be cleaned at one time if the inspection sampling indicates cleaning is needed to comply with maintenance standards established under S5.C.4.c of the Permit.

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

e. The City will indicate compliance with the inspection requirements indicated in a, b, c and d above by either instituting an inspection program designed to inspect all sites and achieving inspection of 95% of all sites. Alternatively, the City may demonstrate compliance through records indicating that at least 95% of all catch basins and inlets have been inspected and/or cleaned within the term of the permit.

f. The City has established or will establish practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads or highways owned or maintained by the City, and road maintenance activities conducted by the City. The following activities will be addressed:

- Pipe cleaning
- Cleaning of culverts that convey stormwater in ditch systems
- Ditch maintenance
- Street cleaning
- Road repair and resurfacing, including pavement grinding
- Snow and ice control
- Utility installation
- Pavement striping maintenance
- Maintaining roadside areas, including vegetation management
- Dust control

g. The City will establish or has established the implementation of policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the City and that are subject to this Permit, including but not limited to: parks, open space, road right-of-way, maintenance yards, and stormwater treatment and flow control facilities. These policies and procedures will address, but are not limited to:

- 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. The City will 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 this 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. The City will develop and implement 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 this 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. A generic SWPPP that can be applied at multiple sites may be used by the City to comply with the Permit. The SWPPP will include periodic visual observation of discharges from the facility to evaluate the effectiveness of the BMP.

j. Records of inspections and maintenance or repair activities conducted by the City as is necessary for the Permit will be maintained in accordance with Permit condition S9 *Reporting Requirements*.

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The City has a very good program for maintenance of City owned facilities. The City also has a policy of accepting stormwater management systems that are constructed as a part of a residential subdivision that would have a mix of private and public stormwater discharges. Stormwater detention and water quality systems are captured in a maintenance management system and are programmed for inspection and maintenance management. The maintenance section of the Stormwater Utility is additionally provided with system drawings and any written procedures for use during maintenance.