

CITY OF BLACK DIAMOND
STORMWATER MANAGEMENT PROGRAM
(SWMP)

2010 ANNUAL UPDATE



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THIS PLAN IS BASED ON THE REQUIREMENTS OUTLINED IN THE WESTERN WASHINGTON PHASE II MUNICIPAL STORMWATER PERMIT. MUCH OF THE LANGUAGE INCLUDED IN THIS DOCUMENT DESCRIBING PERMIT REQUIREMENTS HAS BEEN TAKEN DIRECTLY FROM THIS PERMIT AND HAS BEEN SUMMARIZED FOR EASE OF THE READER.

FOR COMPLETE REQUIREMENTS AND DETAILS, PLEASE REFER TO SECTION S5.C OF THE WESTERN WASHINGTON PHASE II MUNICIPAL STORMWATER PERMIT.

SECTION 1 – INTRODUCTION

1.1 INTRODUCTION

This document constitutes the City of Black Diamond's Stormwater Management Program (SWMP) as required under Condition S5 of the Western Washington Phase II Municipal Stormwater Permit (the Permit). In addition to the City's permit, this SWMP includes the Total Maximum Daily Load (TMDL) requirements on Lake Sawyer as published in the TMDL document 09-10-053.

The purpose of SWMP is to detail actions that the City of Black Diamond has taken and will take to maintain compliance with conditions in the permit. This SWMP will be an attachment to the *Annual Report Form for Cities, Towns, and Counties* which is required to be submitted to the Department of Ecology by March 31st each year.

The City's SWMP is intended to reduce the discharge of pollutants from the City's Municipal Separate Storm Sewer System to the maximum extent practicable, meet Washington State's All Known and Reasonable Treatment requirements, and protect water quality. This goal is accomplished by the inclusion of all Permit SWMP components, minimum measures, 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.

The City now is active in 5 areas of permit activity including:

- Educating the public with a current focus on homeowner activities

- Involving the public in stormwater management programming
- Building an Illicit Discharge Detection and Elimination Program
- Establishing a permitting, inspection program to enforce the Department of Ecology 2005 stormwater Management Manual for Western Washington
- Reviewing all Municipal operations and Facilities and implementing new operation and maintenance practices to prevent and reduce stormwater pollutant runoff from municipal operations.

SECTION 2 –MONITORING AND REPORTING

2.1 PERMIT REQUIREMENTS AND DATES

Section S5.A, S8, and S9 of the Western Washington Phase II Municipal Stormwater Permit requires the City to develop, monitor, and report the City's Stormwater Management Program (SWMP). The Stormwater Management Program shall be designed to reduce the discharge of pollutants from the City stormwater system to the maximum extent practicable and to protect water quality. The monitoring and reporting requirement helps keep the city on track with best management practices to reduce the discharge of pollutants to stormwater.

2.2 CURRENT ACTIVITIES

The current city activities associated with Monitoring and reporting include:

- Submit the *Annual Report Form for Cities, Towns, and Counties* which is intended to summarize the City's compliance with the conditions of the Permit. The annual report shall be submitted by March 31 of each calendar year covering the previous calendar year.
- Prepare written documentation of the SWMP and update at least annually for submittal with the City's annual reports to the Department of Ecology.
- Include with the annual report, notification of any annexations, incorporations, or jurisdictional boundary changes resulting in an increase or decrease in the City's geographic area of permit coverage during the reporting period and the implications for the SWMP.
- Track the number of inspections, official enforcement actions and types of public education activities for inclusion in the City's annual reports to the Department of Ecology.
- Provide a description of any stormwater monitoring or studies conducted by the City during the reporting period for inclusion in the City's annual reports to the Department of Ecology.
- Track the estimated cost of development and implementation of the SWMP.

2.3 PLANNED ACTIVITIES

Actions recommended for continued Permit compliance include:

- Now that the City has a separate storm water utility most of the permit compliance activities can be reasonably estimated and tracked by reviewing the actual expenses within the stormwater budget. There are some activities that are expended outside the stormwater utility and those will be estimated and reported in the annual report.
- Survey a random select group from Black Diamond on any changes in car washing practices and report findings in the next annual report.
- Collect base line water quality information in the natural drainage system as surface water drains into, through and out of Black Diamond.
- Coordinate, as necessary, with other entities covered under a municipal stormwater NPDES permit to encourage coordinated stormwater-related policies, programs and projects within adjoining or shared areas.
- Complete annual update to the City's SWMP.
- Summarize annual activities for the Annual Compliance Report.

SECTION 3 –PUBLIC EDUCATION AND OUTREACH

3.1 PERMIT REQUIREMENTS AND DATES

Section S5.C.1 of the Western Washington Phase II Municipal Stormwater Permit requires the City to include an education program to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. Specific program components are outlined below.

- Distribute stormwater education information to residents in Black Diamond by Feb 15, 2009
- Track the types of public education and outreach activities implemented; Feb. 15, 2009
- Measure the stormwater education level of the public; Feb 15, 2009

3.2 CURRENT ACTIVITIES

The City currently has been educating the public in Black Diamond by direct mailing stormwater articles in the city newsletter, posting educational materials on the stormwater website, and coordinating various stormwater classes and workshops to train City staff. The first level of education has been educate the public on the need for a stormwater utility and why everyone in Black Diamond needs to assist with the effort to improve the stormwater quality in Black Diamond.

3.3 PLANNED ACTIVITIES

Actions recommended for continued Permit compliance in public education and outreach include:

The City's goal for 2010 is to:

- Continue with the direct mailing of 3 to 4 education articles included in the City newsletter. Year 2010 emphasis will be on car washing and yard care. The education materials are also sent to all businesses in town as well.
- Educate the businesses, industries, landscapers and property managers; and Engineers, contractors, developers, through direct contact within the permitting processes.
- Educate the elected officials, review staff, planning staff and other City employees through workshops, in house trainings and meetings.

- Develop a short assembly curriculum to educate school children on the impacts of stormwater runoff on the environment and Best Management Practices that homeowners can implement to help protect the environment. Approach the local school district to set up regular educational outreach in the schools.
- Track and maintain records of public education and outreach activities.
- Evaluate understanding and adoption of target behaviors.
- Summarize the 2009 public education activities in the Annual Compliance Report.

SECTION 4 – PUBLIC INVOLVEMENT AND PARTICIPATION

4.1 PERMIT REQUIREMENTS AND DATES

Section S5.C.2 of the Western Washington Phase II Municipal Stormwater Permit requires the City to provide ongoing opportunities for public involvement beginning in 2008.

4.2 CURRENT ACTIVITIES

The current compliance activities associated with public involvement and participation include:

- The City has posted the SWMP document and Annual Compliance Report on the City website.
- The City has held various public meetings for the consideration of stormwater budget issues, stormwater grant opportunities, and consulting contracts for the development of a stormwater comprehensive plan.
- Publicized Public Works Committee meetings were held to discuss the Stormwater Comprehensive Plan.

4.3 PLANNED ACTIVITIES

The City shall offer the public opportunities to be involved in the decision making process on stormwater issues. Actions recommended for continued compliance include:

- Provide opportunities for public involvement through encouraging participation in the review of the storm water comprehensive plan, the stormwater management plan updates, changes to the stormwater utility charges, or other stormwater codes or similar environmental policies at the early consideration stages at the public works committee level.
- Provide opportunities for the public involvement and comment in the consideration of the Stormwater Management Plan (SWMP) by holding a public hearing prior to adoption.
- Hold at least 2 readings of the Stormwater Management Plan prior to adoption.
- Make the SWMP, the annual report, and all other submittals required by the Phase II Permit, available to the public.

- Post the updated SWMP and the annual report, on the City's website.

SECTION 5 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

5.1 PERMIT REQUIREMENTS AND DATES

Section S5.C.3 of the Western Washington Phase II Municipal Stormwater Permit requires the City to develop and implement an ongoing program to detect and remove illicit connections, discharges, and improper disposal, including spills, into the municipal separate storm sewers owner or operated by the City. Specific program components are outlined below.

- Publicly list and publicize a hotline or other local telephone number for public reporting of spills and other illicit discharges by February 15, 2009. The City shall keep a record of calls received and follow-up actions taken.
- 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 by August 15th, 2009.
- Ensure municipal field staff responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, improper disposal and illicit connections are trained to conduct these activities by August 15th, 2009.
- Provide follow-up training as needed to address changes in procedures, techniques, or requirements.
- Prioritize receiving waters for visual inspection by February 15th, 2010.
- Ensure 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 shall be trained on the identification of an illicit discharge/connection, and on the proper procedures for reporting and responding to the illicit discharge/connection.

The City's goal is to complete the following by **February 15, 2011**:

- Conduct field assessments of three high priority water bodies.
- Conduct field assessments on at least one high priority water body annually henceforth.

- Develop a municipal storm sewer system map, to be available upon request, that shall be periodically updated and shall include the location of all known municipal separate storm sewer outfalls and receiving waters and structural stormwater BMP's owned, operated, or maintained by the City. Include tributary conveyances, associated drainage areas, and land use for all storm sewer outfalls with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. The map shall include all connections to the municipal separate storm sewer authorized or allowed by the City, as well as geographic areas that do not discharge stormwater to surface waters.

The City's goal is to complete the following by **August 19, 2011**:

- Develop and fully 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. Include procedures for locating priority areas likely to have illicit discharges and field assessment activities including visual inspection of priority outfalls.
- Develop and implement procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the City
- Develop and implement 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
- Develop and implement 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 actions if the discharge is not eliminated.
- Inform and distribute appropriate information to public employees, businesses, and the general public regarding the hazards associated with illegal discharges and improper disposal of waste.
- Develop and implement procedures for program evaluation and assessment, including tracking the number and type of spills or illicit discharges identified; inspections made

5.2 CURRENT ACTIVITIES

The City currently implements activities and programs that meet some of the Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The Black Diamond City Council adopted an illicit Discharge Detection and Elimination Ordinance on August 6th, 2009. The city staff now has the ability to intervene and stop Illicit discharges and get involved to educate those that pollute unknowingly and follow up with additional enforcement actions if compliance is not afforded.
- Four staff including three public works staff and a policeman were trained in July 2009 on Illicit discharge awareness and IDDE Response and Enforcement. Additionally one of the local fire district officers also came to the training.
- Responding to reported illicit discharge reports and documenting the actions taken to eliminate them.

5.3 PLANNED ACTIVITIES

The City plans to:

- Continue with following up on hotline illicit discharge tips,
- Continue refining the stormwater system maps;
- Continue keeping the responsible city staff trained to recognize and detect illicit discharges and to follow up with enforcement actions.
- Develop and implement stormwater outfall illicit discharge screening program.
- Select and implement IDDE issue tracking/resolution system.
- Revise current IDDE response process into a standard, City-wide IDDE response and enforcement process.
- Identify areas of the City that have higher probability of Illicit Discharges or Connections to the Stormwater system.
- Prioritize assessment of receiving waters
- Develop a program for detecting, tracing to the source and removing the source of an illicit discharge. Also provide training for such a program.

SECTION 6 – CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT AND CONSTRUCTION SITES

6.1 PERMIT REQUIREMENTS AND DATES

Section S5.C.4 of the Western Washington Phase II Municipal Stormwater Permit requires the City to develop, implement, and enforce a program to reduce pollutants in stormwater runoff from new development, redevelopment and construction site activities. Specific program components are outlined below.

The City will continue with

- A program to reduce pollutants in stormwater runoff from new development, redevelopment and construction site activities. This program shall 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 shall apply to private and public development, including roads.

- The City of Black Diamond has adopted the Department of Ecology 2005 Stormwater Management Manual to address runoff from new development, redevelopment, and construction site projects in conformance with Permit requirements. The City has retained existing local requirements to apply stormwater controls at smaller sites, or at lower thresholds. The DOE 2005 Manual includes:
 1. An enforceable mechanism that includes a site planning process and BMP selection and design criteria in conformance with Permit requirements.
 2. A BMP selection and design criteria and requirements will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy State AKART requirements.
 3. The legal authority, through the approval process for new development, to inspect private stormwater facilities that discharge to the City's stormwater system.
 4. Allows 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.

The city has the primary enforcing ordinances in place for the Implementation of a program to manage the proper handling of stormwater for development and redevelopment. Some permit processing needs to be reviewed and appropriate fees set. The city program will include:

- A permitting process with plan review, inspection and enforcement capability for both private and public projects. At a minimum, this program shall 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.
- Review stormwater site plans for proposed development activities.
- Inspect, prior to clearing and construction, all known development sites that have a high potential for sediment transport.
- 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.
- 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.
- Develop and implement an enforcement strategy to respond to issues of non-compliance.
- Develop and implement a long-term operation and maintenance (O&M) program for post-construction stormwater facilities and BMPs.
- Adopt an ordinance or other enforceable mechanism that clearly identifies the party responsible for maintenance, requires inspection of facilities, and establishes enforcement procedures.
- Establish maintenance standards that are as protective or more protective of facility function than those specified in the 2005 Stormwater Management Manual for Western Washington.
- Perform maintenance within required timeframes when an inspection identifies a maintenance standard has been exceeded. For each violation of the required timeframe, the City shall document the circumstances and how they were beyond their control.

- Inspect 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.
- Implement a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, other enforcement records, maintenance inspections and maintenance activities.
- Provide 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.
- Ensure 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.

6.2 CURRENT ACTIVITIES

The City code currently implements the majority of the activities and programs to meet Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The city review and inspection staff is coming up to speed on the full implementation of the Department of Ecology 2005 Stormwater Management Manual.
- The City conducts construction and stormwater site inspections during the pre-construction and construction phases.
- The City regularly inspects existing private storm water quality and detention ponds.

6.3 PLANNED ACTIVITIES

The City has a program to help reduce stormwater runoff from new development and construction sites but has a goal to increase training and hire staff with expertise in the implementation of the DOE 2005 SWMM in order to maintain compliance as Permit requirements are phased in over the next several years. Actions that are recommended for continued compliance include:

- Review procedures for tracking and documenting Permit-related plan review, inspection, enforcement, and compliance activities and update as needed.
- Update and implementing process codes, fees and standards as necessary and as identified need.
- Distribute copies of the Notice of Intents for Construction Activity and Industrial Activity.
- Determine staff training needs and develop training strategies.
- Summarize annual activities for the “Controlling Runoff from New Development, Redevelopment and Construction Sites” component of the Annual Compliance Report.

SECTION 7 – POLLUTION PREVENTION AND OPERATION AND MAINTENANCE FOR MUNICIPAL OPERATIONS

7.1 PERMIT REQUIREMENTS AND DATES

Section S5.C.5 of the Western Washington Phase II Municipal Stormwater Permit requires the City to develop and implement an operations and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Specific program components are outlined below.

The City's goal is to complete the following by **February 15, 2010**:

- Establish maintenance standards that are as protective, or more protective, of facility function than those specified in the 2005 Stormwater Management Manual for Western Washington.
- Perform maintenance within required timeframes when an inspection identifies an exceedance of the maintenance standard. For each exceedance of the required timeframe, the City shall document the circumstances and how they were beyond their control.
- Inspect annually all municipally owned or operated permanent stormwater treatment and flow control facilities, other than catch basins, and take appropriate maintenance actions in accordance with the adopted maintenance standards. The annual inspection requirement may be reduced based on inspection records.
- Conduct spot checks of potentially damaged stormwater facilities (other than catch basins) after major storm events.
- Establish and implement 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.
- Establish and implement policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the City and 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.
- Develop and implement an on-going training program for City employees whose construction, operations or maintenance job functions may impact stormwater quality.

- 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.

The City's goal is to complete the following by **February 15, 2012**:

- Inspect at least once, and clean if necessary, all catch basins and inlets owned or operated by the City.

7.2 CURRENT ACTIVITIES

The City currently has activities and programs that meet some of the Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The City has a program for catch basin inspections.
- At the time of the SWMP development the City has completed a site assessment of City Facilities including the Fire Station, the Police Station, the Public Works Facility and the Water Reservoir and pump station.
- The City inspects City owned stormwater treatment facilities but is formalizing and adding to the inspection criteria as identified in the DOE 2005 SWMM.
- The city has trained employees whose construction, operations or maintenance job functions may impact stormwater quality in the implementation of Best Management Practices that will reduce or eliminate pollution from entering stormwater systems from City facilities or operations.
- The city is in the process of implementing a Stormwater Pollution Prevention Plan (SWPPP) for the city heavy equipment maintenance and storage/material yard and owned by the City.

7.3 PLANNED ACTIVITIES

The City has a program to limit stormwater pollution potential related to its municipal operations and maintenance program, but has a goal to expand current efforts in order to maintain compliance as Permit requirements are phased in over the 2010 year. Actions that are recommended for continued compliance include:

- Update inspection, operation and maintenance processes and procedures for City-owned or operated stormwater catch-basins and flow control and treatment facilities.
- Develop and establish policies and procedures to reduce pollutants in stormwater discharges from lands owned or maintained by the City.
- Develop and implement training programs for staff whose work could impact stormwater quality.
- Update tracking and documentation methods and procedures associated with inspection, maintenance or repair activities.
- Implement Stormwater Pollution Prevention Plans (SWPPPs) for City Facilities.
- Summarize annual activities for the “Pollution Prevention and Operation and Maintenance for Municipal Operations” component of the Annual Compliance Report.