

NPDES PERMIT YEAR 13 ANNUAL REPORTS
GRESHAM REPORT SUBMITTED TO DEQ November 1, 2008
PORTLAND REPORT SUBMITTED TO DEQ November 1, 2008



Multnomah County
Stormwater
Management Program:
NPDES Stormwater
Permit Program
Annual Reports

November 2008



MULTNOMAH COUNTY OREGON

Department of Community Services
Water Quality Program



**MULTNOMAH
COUNTY**

**Multnomah County
Municipal NPDES Annual Report
Permit Year 13
July 1, 2007 – June 30, 2008

Portland Area Permit #101314**

Submitted November 1, 2008

Water Quality Program
Land Use and Transportation Division
Department of Community Services
Multnomah County

I. INTRODUCTION

Multnomah County has implemented a comprehensive countywide stormwater management program since the issuance of the first Municipal Separate Storm Sewer System (MS4) NPDES permit in 1995. The goal of the program is to reduce pollutants in stormwater runoff to the maximum extent practicable. The program is maintained and prioritized in response to federal Clean Water Act requirements and the County's responsibility to protect the health and welfare of its citizens. The County is a co-permittee on two separate MS4 NPDES permits, one for the Portland area, and another for the Gresham area.

The stormwater management program consists primarily of Stormwater Management Plan (SWMP), which is implemented countywide. This plan is submitted to and approved by the Oregon Department of Environmental Quality (DEQ) under the NPDES permit. The County's roles and responsibilities for complying with the permit term falls under seven categories of Best Management Practices (BMPs) with a focus on operating and maintaining the County bridges and roads.

This Compliance Report for Permit Year 13 (July 1, 2007 through June 30, 2008) documents the implementation activities of Multnomah County's Stormwater Management Plan in the City of Portland NPDES permit area. The activities the County continues to engage in within the Portland permit area cover only a fraction (2%) of the permit area. For a full discussion of monitoring completed for this permit, please refer to the NPDES Annual Compliance Report Permit Year 13, submitted by the City of Portland.

The permit renewal process began during this Permit Year, which included an evaluation of the Stormwater Management Plan (SWMP). The evaluation led to a few changes to individual BMPs and new measurable goals. Generally, the changes were not substantive but were made to consolidate information where it was repetitive, eliminate information that was not relevant, remove information that was outdated, and improve the readability of the document. The rationale for the changes in the plan are given in the table in Section III, as well as in the Draft SWMP submitted to DEQ.

Description of the County's Permit Area

Within Portland's NPDES permit area, Multnomah County is only responsible for the operations and maintenance of five of the Willamette River bridges (Broadway, Hawthorne, Burnside, Morrison, and Ross Island Bridges) and for the development review of right-of-way connections in the small unincorporated pocket areas within the Portland Urban Services boundary.

Multnomah County's responsibility within the Portland Permit area has significantly diminished over the years. In 1984, the County transferred road and drainage facility

maintenance to the City for roads in the unincorporated pocket areas within the Portland Urban Services Boundary through an Intergovernmental Agreement known as the “Westside Pocket Area Maintenance Agreement”. The agreement ensures that road and drainage facility maintenance provided by the City is to be provided in a manner consistent with applicable operations and maintenance BMPs as set forth in the City of Portland’s Stormwater Management Plan under their MS4 NPDES Permit.

Multnomah County entered into an Urban Planning Area Agreement (UPAA) with the City of Portland as a result of the Metro Urban Growth Management Functional Plan in 1998. The UPAA provided for the coordination and orderly conversion of unincorporated urbanizable land in the County to urban uses and authorized the City to prepare applicable comprehensive plan and implementing ordinances for the County’s urban areas. The County adopted the City’s applicable land use regulations, comprehensive plan and zoning through County Ordinance 967, which went into effect January 1, 2002. Under the UPAA, the County agreed to transfer to the City responsibility for implementing and administering comprehensive plan and zoning regulations for all County unincorporated areas within the City’s Urban Services Boundary.

An important aspect of the UPAA is the expressed responsibility of the City to address, through their comprehensive plan and zoning regulations, erosion control, floodplain review, grading, and stormwater disposal. Further, land use planning review shall be provided by the City in a manner consistent with applicable best management practices as set forth in the City of Portland MS4 NPDES Permit. The level of review shall be provided at the same level provided by the City to other areas within the City limits.

II. STORMWATER MANAGEMENT PLAN OVERVIEW

The Multnomah County Stormwater Management Plan is a set of Best Management Practices (BMPs) designed to reduce stormwater pollutants to the maximum extent practicable. The County’s stormwater management plan is made up of thirty-five BMPs grouped into seven categories as shown below:

- Public Involvement and Education (PI);
- Operations and Maintenance (OM);
- Illicit Discharges Control (ILL);
- New Development Standards (ND);
- Structural Controls (STR);
- Natural Systems (NS); and
- Program Management (PM).

The plan includes a variety of structural and non-structural controls in managing stormwater; however, not all BMPs apply within the Portland permit area.

BMP Categories

Public Involvement and Education (PI)

The Public Involvement and Education BMPs are designed to inform and educate the public about the causes of stormwater pollution, the effects on local streams and rivers, and the need for stormwater management, and to encourage active participation in pollution reduction efforts.

Operations and Maintenance (OM)

Several activities are conducted by the County to address stormwater quality impacts from routine operations and maintenance activities both inside and outside the permit area. The County's Road Maintenance and Operation Manual describes the various maintenance activities performed by the County related to roadways and associated storm drainage facilities. The manual includes procedures for routine inspection and maintenance of facilities with the dual purpose of providing flood control and protecting water quality. A series of field logs are used along with the manual for use in tracking progress of the maintenance program and evaluating effectiveness over time. The County provides continued training to staff regarding record keeping and reporting requirements. County staff assesses the effectiveness of maintenance and adjusts methods and/or frequencies as needed to improve stormwater quality.

Illicit Discharges Control (ILL)

Illicit Discharges Control BMPs are designed to reduce the frequency and impact of accidental non-stormwater discharges to the stormwater system, and to control illicit connections to the MS4. Noticeable illicit discharges are reported to the appropriate agency for follow up action. Examples of this are private truck hauling practices, excessive littering, illicit connections, illegal dumping, and other leaks, spills or release of contaminants.

New Development Standards (ND)

New Development Standards (ND) BMPs are designed to mitigate pollutant discharges and other water quality impacts associated with new development and redevelopment during and after construction.

Much of Multnomah County’s jurisdiction in the original permit area has been annexed or transferred to by the Cities of Portland, Gresham, and Troutdale, since the first permit term. There is no unincorporated area within the permit area containing industrial or commercial facilities or park land.

Structural Controls (STR)

These BMPs are designed to implement structural modifications (constructed facilities) to existing systems/development to reduce pollutants in discharges from the municipal separate storm sewer system.

Natural System (NS)

These BMPs are designed to help preserve and restore the natural environment/functions to reduce pollutants in discharges from the municipal separate storm sewer system.

Program Management (PM)

Program Management BMPs ensure effective program management, coordination, and reporting. The County implements several other activities required by the NPDES regulations and additional activities in order to ensure the proper management and success of the program.

Functional Groups

Managers and staff in the Multnomah County Department of Community Services, Land Use and Transportation Division are organized into “functional groups” to implement the Stormwater Management Program. The functional groups are assigned specific BMPs, as described below:

- Public Affairs
- Bridge Engineering
- Bridge Maintenance
- Land Use and Transportation Planning
- Environmental Compliance
- Emergency Response
- Right-of Way Permits
- Road Maintenance
- Road Engineering
- Program Management

III. Best Management Practices Summary of Activity

Annual Compliance Reports for the Municipal NPDES Stormwater Permit are required to include information relating to each BMP task and schedule. The following matrices provide this information, in summary form, for each BMP. More detail is available upon request through documentation in the Multnomah County Transportation Division of the Department of Community Services.

The following matrix provides the following information:

- √ A short description of the Best Management Practice, with BMP Number.
- √ The overall intent, goals and objectives of the Best Management Practice.
- √ The Multnomah County 'Functional Group(s)' designated as responsible for BMP Implementation.
- √ Key accomplishments for Permit Year 13.
- √ Assessment of Controls.
- √ Any proposed modifications or changes to the schedule or activities.

Best Management Practices (BMPs) Matrix for Permit Year 13

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
<p>Public Involvement and Education (PI). These activities are designed to inform and educate the public about the causes of stormwater pollution, the effects on local streams and rivers, and the need for stormwater management and to encourage active participation in pollution reduction efforts.</p>				<p>New measurable goals are proposed for in the new draft of the SWMP.</p>	
<p>PI1. Participate in <u>Regional Public Education Efforts</u>. Continue support and direct participation for public involvement and public education campaigns.</p>	<p>Participate with regional entities and cities in coordinating new and existing efforts to educate and inform the public about stormwater pollution problems, and to involve the public in developing stormwater pollution prevention programs. The County will provide support for the various public involvement and education activities provided by the Regional Coalition of Clean Rivers and Streams. The County will make staff and materials available as requested and practicable, and will grant volunteers and other clean-up groups access to the County right-of-way whenever feasible.</p>	<p>Public Affairs</p>	<ul style="list-style-type: none"> • The Regional Coalition for Clean Rivers & Streams focused this year's efforts to broadcast a television commercial encouraging the public to adopt habits at home and in their community that reduce stormwater pollution and improve the health of local rivers and streams. The ad ran on cable television stations that focus on home and garden interests. • Public Affairs staff participated in the reviews of the Coalition's website redesign project. The goal was to create a more interactive and simplified presentation with stronger, more cohesive visuals. The new website was launched in 2008, producing interest in the news media and an increase in traffic to the website. Public Affairs staff helped to promote the website to internal and external audiences. 	<ul style="list-style-type: none"> • Notes of meetings and annual report. • Participation in the coalition and evaluation of campaigns. 	<p>On schedule. No modifications.</p>
<p>PI2. <u>Participate in Public Meetings</u>. Present information to public regarding Multnomah County programs and regulation, particularly water quality program.</p>	<p>Educate the public about the County's role in protecting stormwater quality and the opportunities for public participation in pollution prevention as well as public involvement and education on stormwater pollution problems by attending public meetings.</p>	<p>Program Management</p>	<ul style="list-style-type: none"> • Water Quality staff attended meetings of the Johnson Creek watershed council. • The County sits on the the Lower Willamette Agricultural Water Quality Management Area Local Advisory Committee which developed water quality rules for agricultural practices under the authority of Senate Bill 1010. 	<ul style="list-style-type: none"> • Notes and records of meeting attendance. 	<p>On Schedule. No modification.</p>

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
<p>PI3. <u>Distribute public education information regarding stormwater.</u> Brochures and educational materials at County offices, public water quality events, and maintenance of County Water Quality Program website.</p>	<p>Provide information to educate and inform the public about stormwater pollution problems and to encourage public involvement in stormwater pollution prevention programs.</p>	<p>Program Management</p>	<ul style="list-style-type: none"> • County participated at the 2007 Salmon Festival at Oxbow Park. County staff and volunteers staffed a booth with a working watershed model and other activities to learn about salmon and watershed health. • Various water quality BMP fact sheets are made available in County offices. • County's Water Quality website was updated. 	<ul style="list-style-type: none"> • Estimate number of brochures and educational materials. • Consider most effective venues for distribution of materials. 	<p>New Draft: The task to develop and implement a distribution strategy was removed because the County has limited outlets for materials for other agencies material and the County relies on other entities for public education programs. A new task was added to ensure that the educational materials that are distributed are current and cover relevant topics</p>
<p>PI4. <u>Training and education for County personnel</u> about impacts of on-the-job activities to the MS4, and how to minimize impacts to receiving streams. Include erosion control seminars, stormwater maintenance activities, inspection practices, construction BMPs, and other activities for in-house and field personnel. Include training and education relating to water quality learned in conferences. In addition, educate County staff about the public's role in protecting water quality on a watershed-wide basis.</p>	<p>Through training of County staff, minimize/eliminate the impact of on-the-job activities to the MS4 and stormwater quality.</p>	<p>All Functional Groups</p>	<ul style="list-style-type: none"> • Water Quality staff attended an ODOT Erosion Control Training. • Vegetation Management staff continued to attend regular meetings of the Cooperative Weed Management Areas group, in addition to local knotweed and garlic mustard control meetings. • Water Quality staff conducted new Road Maintenance staff orientation on environmental regulations and compliance, including stormwater management and ESA issues. • Water Quality staff gave an environmental regulation update and review for all Road Services staff. • Road Maintenance staff attended Emergency Spill Response Annual training. 	<ul style="list-style-type: none"> • Track attendance at water quality conferences, trainings, etc. • Track educational material disseminated to staff. • Keep records of trainings provided. 	<p>New Draft: The task to disseminate new training materials was removed because this task is already implicit in the task that is under this BMP to conduct training on new approaches to water quality protection.</p>

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
PI5. Implement the Multnomah County <u>Adopt-A-Road program</u> to promote public awareness of litter control and impacts to roads and waterways. Increase use of volunteers and track work by volunteers, including County inmate work crews.	Educate the public regarding the storm water pollution that results from littering. Work with citizen action programs to facilitate efforts to reduce littering.	Road Maintenance	<ul style="list-style-type: none"> • <i>BMP not implemented in the Portland permit area.</i> 	<ul style="list-style-type: none"> • N/A 	New Draft: The task to utilize inmate crews to pick up trash bags was removed because this is a consistent element of the program, not subject to change. This task was incorporated into a broader task of program support. Two tasks were also added: the first to promote the adopt-a-road program, and the second to provide program support such as providing equipment and coordination for volunteers.
PI6. Implement <u>Signage Programs</u> to Protect Stormwater Quality to promote public awareness of the importance of keeping pollutants out of storm drains as opportunities arise.	Reduce/eliminate the illicit discharges into street storm drains to protect water quality by reducing illicit discharges and impact by the public. Educate the public about drainage ways, impacts to streams from storm sewer systems, and watershed awareness.	Road Maintenance	<ul style="list-style-type: none"> • <i>BMP not implemented in the Portland permit area.</i> 	<ul style="list-style-type: none"> • N/A 	On Schedule. No Modification.
PI7. <u>Maintain Public Involvement during the CIP Process.</u> Ensure public involvement during two-year update process for Capital Improvement Plan and Program that addresses stormwater quality impacts and issues. Identify NPDES drainage issues and remedies on Capital Improvement Plan project scope sheets. Include in project atlas during public review process	Improve public awareness of properly designed stormwater facilities' ability to remove pollutants and protect water quality.	Transportation Planning	<ul style="list-style-type: none"> • No new projects were added to the CIP during 2007-2008, and therefore the full public process was not conducted. However, the Sellwood Bridge project is ongoing, and public involvement efforts around the environmental and planning stages of the bridge are continuing. 	<ul style="list-style-type: none"> • Record involvement in public meetings through regular CIP process. 	On schedule. No modifications.
PI8. <u>Facilitate Public Reporting of Illicit Discharges including illegal dumping</u> of pollutants, trash, or illegal fill (dirt/soil).	Control illicit discharges from illegal dumping to protect water quality.	Emergency Response Road Maintenance Bridge Maintenance Right-of-Way Permits	<ul style="list-style-type: none"> • No activity to report 	<ul style="list-style-type: none"> • Keep records of how problems are being corrected. 	On schedule. No modifications.

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<p>Operations and Maintenance (OM). These activities are designed for the Implementation of operations and maintenance practices for public streets, bridges, storm sewers and other facilities to reduce pollutants in discharges from the municipal separate storm sewer system.</p>					
<p>OM1. <u>Inspect and maintain the Storm Drainage System</u> including inlets, catch basins, water quality facilities and stormwater conveyance system on a regular basis</p>	<p>Ensure that inlets, catch basins, sumps and stormwater conveyance system are maintained in a manner that reduces pollutants to the maximum extent practicable. Continue to review and revise operations and maintenance procedures as appropriate.</p>	<p>Road Maintenance</p>	<ul style="list-style-type: none"> Catch basin storm filters inspected, maintained and replaced on Broadway and Burnside Bridges. The used filter cartridges are returned to the manufacturer for recycling. Routine bridge maintenance includes clearing debris and flushing drains every three months to ensure drains are not plugged and possible overflow. 	<ul style="list-style-type: none"> Review Field Logs to check that RMOM schedule and procedures have been followed. Review the records on a semiannual basis to evaluate the effectiveness of current practices and to help locate priority areas that may require more attention. Identify these areas on maps for use in planning future operations. 	<p>New Draft: The task to inspect sweeping equipment was removed because it is a routine activity covered under the Road Maintenance and Operations Manual.</p>

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<p>OM2. <u>Conduct street sweeping</u> to include scheduled sweeping, equipment review, and training on a regular basis. Revise and update schedule, equipment, and training as necessary.</p>	<p>The objective of the street sweeping program for county roads is to reduce materials on the roadway and impacts to the stormwater system. The County will continue to review and revise the program and schedule and make improvements as appropriate.</p>	<p>Road Maintenance</p>	<ul style="list-style-type: none"> • <i>BMP not implemented in the Portland permit area. County roads operated and maintained by agreement with City of Portland.</i> 	<ul style="list-style-type: none"> • Not Applicable 	<p>On schedule. No modifications.</p>
<p>OM3. <u>Properly dispose of road waste material.</u> Record amounts and location of material disposed. Test for disposal using an independent lab and record/file test results. Review different disposal procedures for street sweeping vs. Vector pad materials. Continue to investigate feasibility of decant facility for County waste materials. Work cooperatively among County divisions to reduce water quality impacts of site handling, storage, and disposal areas for material collected during road maintenance activities. The County has adopted DEQ/ODOT Road Waste Management Practices.</p>	<p>The objective of the road waste disposal operations for county roads is to reduce materials on the roadway and impacts to the stormwater system. The goal is to identify and implement practices for disposal of road waste materials that protect water quality. Monitor if current outdoor storage activities are contributing sediments to stormwater runoff. Recommend practices to control discharges as needed.</p>	<p>Road Maintenance Emergency Response</p>	<ul style="list-style-type: none"> • <i>County roads operated and maintained by IGA with Portland. Portland is responsible for proper disposal of road waste materials on County roads.</i> 	<ul style="list-style-type: none"> • Review records and study results, implement recommendations as practicable. 	<p>On schedule. No modifications.</p>
<p>OM4. <u>Evaluate anti-icing operations.</u> Investigate the potential to reduce the use of sanding materials for seasonal anti-icing operations. Continue testing of alternative anti-icing methods and materials (e.g., CMA). Prohibit the use of salt or glycol on the roadways. Collect sanding material distributed during storm events as soon as feasible. Continue collection and recycling of sand throughout the County's portion of the permit area.</p>	<p>Reduce harmful effects of roadway anti-icing activities and materials on water quality by proper sand collection methods and by prohibiting the use of glycol and salt.</p>	<p>Road Maintenance</p>	<ul style="list-style-type: none"> • <i>BMP not implemented in the Portland permit area. County roads operated and maintained by IGA with Portland.</i> 	<ul style="list-style-type: none"> • Not applicable. 	<p>New Draft: Tasks to prohibit the use of salt and glycol and to procure funding for the anti-icing program were removed because these are policies rather than actual tasks.</p>

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
<p>OM5. <u>Regulate truck hauling practices to minimize pollutant discharges.</u> Review practices with field crews annually. Recommend revisions (if necessary) to limit occurrence of leaks, spills, or other releases. Continue to test and evaluate asphalt release agents for truck and tool cleanup, which use “environmentally-friendly” products.</p>	<p>Control discharges from truck hauling activities to the extent that they are impacting County right-of-way and/or the municipal separate storm sewer system.</p>	<p>Road Maintenance</p>	<ul style="list-style-type: none"> • Bridge and Road Crews are regularly briefed on proper hauling procedures. 	<ul style="list-style-type: none"> • Monitor number of problems, and response time to address observed problems. • Determine if occurrences of releases are occurring frequently or infrequently. Determine if problems are due to equipment, or due to personnel. Is more training needed? • Determine the potential water quality impacts of new products considered for use. 	<p>New Draft: Tasks relating to staff training and reviewing new product specifications were removed as these are already covered under either BMP PI – 4 (Conduct Training and Education for County Personnel), or BMP OM-1 (Review the RMOM for Potential Updates to Address Water Quality).</p>
<p>OM6. <u>Perform culvert maintenance</u> by inspecting and maintaining culverts in ways that minimize impacts to water quality. Consider opportunities to retrofit culverts to provide better water quality treatment. Continue to maintain culvert inventories. Make distinction as to whether culverts are fish passage culverts and adhere to appropriate maintenance procedure.</p>	<p>Determine if the frequency of current operation and maintenance practices allows for reduction of pollutants to the maximum extent practicable. Improve and retrofit as needed.</p>	<p>Road Maintenance</p>	<ul style="list-style-type: none"> • <i>BMP not implemented in the Portland permit area. County roads operated and maintained by agreement with Portland.</i> 	<ul style="list-style-type: none"> • Not applicable. 	<p>New Draft: This BMP was removed altogether as maintaining culverts is not a water quality measure. However, it is important to conduct culvert maintenance activities using procedures that minimize water quality impacts. These procedures are implemented by the County as already provided for in RMOM under BMP OM-1. Therefore, this BMP description was no longer needed.</p>
<p>OM7. <u>Conduct right-of-way and road shoulders maintenance</u> in ways that avoid and prevent future adverse water quality impacts Continue review of current maintenance practices.</p>	<p>The purpose of this BMP is to control and reduce the amount of sediments discharged to the receiving waters via the right-of-way. Sediments attract and adhere to other pollutants (heavy metals, oil/grease) and increased turbidity/sedimentation on channel bottoms impairs water quality and fish habitat.</p>	<p>Road Maintenance</p>	<ul style="list-style-type: none"> • <i>BMP not implemented in the Portland permit area. County roads operated and maintained by agreement with Portland.</i> 	<ul style="list-style-type: none"> • Not applicable. 	<p>On schedule. No modifications.</p>

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<p>OM8. <u>Conduct ditch maintenance.</u> Review frequency and timing of ditch cleaning in areas where sediment and/or debris tend to accumulate. Determine if the frequency and timing of current ditch maintenance practices allows for reduction of pollutants and minimizes the impact on ditch surface. (If not, recommend and implement improved frequencies, timing, and/or type of equipment to minimize damage to ditch bottom.) Using records, determine where improvements are needed to reduce discharges to ditches.</p>	<p>Control/reduce amount of sediments and pollutants discharged to the receiving waters. Sediments attract and adhere to other pollutants (heavy metals, oil/grease) and increased turbidity/sedimentation on channel bottoms impairs water quality and fish habitat.</p>	<p>Road Maintenance</p>	<ul style="list-style-type: none"> • <i>BMP not implemented in the Portland permit area. County roads operated and maintained by agreement with Portland.</i> 	<ul style="list-style-type: none"> • Not applicable. 	<p>On schedule. No modifications.</p>
<p>Illicit Discharges Control (ILL). These activities are designed to prevent, identify, investigate, and if appropriate, control/eliminate any non-stormwater discharges into the municipal separate storm sewer system.</p>				<p>New measurable goals are proposed for in the new draft of the SWMP.</p>	
<p>ILL1. <u>Interagency coordination on spill response.</u> Continue to work with regional HAZMAT teams on policy matters concerning water quality impacts. Continue cooperative agreements with other agencies to ensure spills are responded to and cleaned quickly. If necessary, clarify and/or improve procedures to ensure effective interagency coordination and rapid response.</p>	<p>Improve procedures to ensure effective interagency coordination and communication, and rapid response.</p>	<p>Emergency Response</p>	<ul style="list-style-type: none"> • No activity to report 	<ul style="list-style-type: none"> • No longer needed 	<p>New Draft: This BMP was removed as a spill response process has been developed and this BMP is no longer relevant.</p>

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<p>ILL2. <u>Implement Spill response in County areas.</u> Continue to manage the spill prevention and response program that reduces the frequency and impact of accidental non-stormwater discharges to the MS4. Revise County Road Maintenance Operation Manual (RMOM), if necessary, to include clear instructions for field personnel in the event of a spill. Improve use of absorbent materials for quick response to minor spills of oil or fluid. Keep records of incidents and response. Continue to coordinate response to appropriate incidents with cities.</p>	<p>Prevent spills to the maximum extent practicable. Respond to accidental non-stormwater discharges promptly to reduce the frequency and overall impact of spills to the stormwater system.</p>	<p>Emergency Response</p>	<ul style="list-style-type: none"> No activity to report 	<ul style="list-style-type: none"> Review logs on an annual basis. Review the RMOM as necessary to ensure revisions were made. Note evaluation in BMP file. 	<p>On schedule. No modifications.</p>
<p>ILL3. <u>Address spills from private truck haulers.</u> Review reporting of and action for noticeable private truck hauling practices causing discharges to County roads and the stormwater conveyance system. Work with County inspection officers for immediate response.</p>	<p>Control discharges from private hauling activities to the extent that they are impacting the County right-of-way.</p>	<p>Road and Bridge Engineering Right-of-Way Permits</p>	<ul style="list-style-type: none"> No activity to report in permit area. 	<ul style="list-style-type: none"> Construction inspectors monitor construction activities on a daily basis, with an emphasis on discharge control. Review agency response to reports by county staff. Work with agency to improve reporting and response procedures. 	<p>On schedule. No modifications.</p>

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
<p>ILL4. <u>Erosion control for County contractors.</u> Implement requirements to control discharges from construction sites to ensure that construction practices do not release sediment and contaminants onto roadways or open space where they may be washed into storm drains or waterways. Continue to require erosion control measures in contract specifications. Continue to require cash deposits, performance-payment bonds, final inspections and other mechanisms to ensure compliance with permit requirements. Review erosion control permit requirements with contractors during projects. Inspect and review Erosion and Sediment Control Plans to ensure control of discharges. Continue pre-construction meetings to disseminate information about requirements to prevent damages during construction projects.</p>	<p>Assure that the design standards in place adequately address water quality issues throughout the permit area.</p>	<p>Road and Bridge Engineering Right-of-Way Permits</p>	<ul style="list-style-type: none"> No activity to report in permit area. 	<ul style="list-style-type: none"> Records kept of Erosion and Sediment Control Plan (ESCP) inspection activities. Review contractor ESCP to ensure compliance. 	<p>New Draft: Added a task to include requirements for pollution controls in contracts for public projects that address additional non-sediment related discharges (e.g., paints, solvents, metals, etc.).</p>
<p>ILL5. <u>Pollution control for County and contractors.</u> Implement a program to reduce, eliminate or recycle discharges of all other pollutants (other than sediment) from road and bridge construction and related sites including county facilities (paints, solvents, metals, etc.). Establish or improve regulations or policy as necessary. Continue inspection as part of daily routine. Continue record-keeping system for reporting any incidents of pollutants or debris. Provide training program to staff to monitor for pollution control.</p>	<p>Eliminate/reduce discharge of all pollutants from construction sites which adversely impact stormwater and receiving water quality.</p>	<p>Land Use and Transportation Planning Road Engineering Bridge Engineering</p>	<ul style="list-style-type: none"> No activity to report in permit area. 	<ul style="list-style-type: none"> Review annually, records kept by staff for the inspection and monitoring of construction sites. 	<p>This BMP was removed as the activities for this BMP were added to the BMP described above.</p>

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
ILL6. <u>Identify and investigate Illicit discharges.</u> Continue to implement a program to identify and investigate illicit discharges (illegal dumping of pollutants including trash, fill, oil, or toxic materials) to the storm sewer system. Report and follow up on reports by County staff when illicit discharges are discovered during the course of job duties.	Eliminate/reduce discharge of all pollutants from construction sites which adversely impact stormwater and receiving water quality.	Emergency Response Right-of-Way Permits Compliance Road Maintenance Bridge Maintenance	<ul style="list-style-type: none"> • Illicit discharge inspections conducted during routine maintenance practices. • Bridge Maintenance staff cleans under-ramps and stairs on all the Willamette River bridges to prevent trash and debris from entering the storm sewer system or waterway below. 	<ul style="list-style-type: none"> • Track follow up and inspection activities. 	On schedule. No modifications.
ILL7. <u>Identify and investigate sanitary discharges to the storm sewer.</u> Continue to implement a program to identify and investigate sanitary discharges to the storm sewer system. Continue a reporting and follow up procedure for County staff to follow when a cross-connection or illicit connection is discovered during the course of job duties.	Identify and investigate any possible sanitary discharges in the storm system.	Right of Way Permits Bridge Maintenance Road Maintenance Compliance	<ul style="list-style-type: none"> • Bridge Maintenance staff inspected and maintained sanitary facilities quarterly on the four Willamette River Bridge with restroom facilities. • <i>County roads operated and maintained by IGA with Portland. Portland inspects for illicit connections during road maintenance activities.</i> 	<ul style="list-style-type: none"> • Track inspections of the operation of the sewage holding facility for prohibited discharge. 	On schedule. No modifications.
New Development Standards (ND). These activities are designed to mitigate pollutant discharges and other water quality impacts associated with new development and redevelopment during and after construction.				New measurable goals are proposed for in the new draft of the SWMP.	
ND1. <u>Coordinate transfer of land use planning authority</u> from the County to the cities, which ensures continuous application of NPDES roles and responsibilities prior to transfer.	Much of the urban area is outside of County jurisdiction as it has been annexed to Portland, Troutdale or Gresham. As this area is transferred, the County will continue to coordinate to ensure continuous land use planning services including NPDES roles and responsibilities.	Land Use Planning	<ul style="list-style-type: none"> • No activity to report 	<ul style="list-style-type: none"> • Track plans reviewed within the permit area where appropriate. 	New Draft: This BMP was removed because the transfer itself is not a water quality BMP, but rather a part of the annexation process.
ND2. <u>Issue grading permits and hillside development permits</u> per County zoning code.	Control/reduce amount of erosion and sediments discharged to the receiving waters. Negative charged clay particles attract and attaches to pollutants (heavy metals, oil/grease). Increased turbidity/ sedimentation on channel bottoms impairs water quality and fish habitat.	Land Use Planning	<ul style="list-style-type: none"> • <i>BMP not applicable in the Portland Permit Area</i> 	<ul style="list-style-type: none"> • Track permits issued in permit area. • Track inspections and follow up of compliance. 	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
<p>ND3. <u>Enforce stream setback requirements</u> and mitigation requirements for designated significant streams and identified waterways through Significant Environmental Concern and Willamette River Greenway permit reviews. Note this standard is for unincorporated areas of the County.</p>	<p>Preserve significant vegetated areas adjacent to identified water bodies to reduce stormwater runoff and the pollutants carried with it..</p>	<p>Land Use Planning Compliance</p>	<ul style="list-style-type: none"> • <i>BMP not applicable in the Portland Permit Area</i> 	<ul style="list-style-type: none"> • Review compliance with conditions of permit. • Review annual number of complaints against enforcement actions, including voluntary compliance. 	<p>New Draft: While the County still implements this BMP, it was removed as it was related to riparian health and is not relevant as a BMP with respect to the MS4. One task that was in this BMP that was maintained was the task to enforce land use and transportation code relating to water quality. This task was moved to, and included under the BMP - Stormwater Treatment for New Development.</p>
<p>ND4. <u>Regulate storm water quality and quantity.</u> Review stormwater regulations, design standards, and criteria, as issued by the City of Portland and other jurisdictions, and consider for use as guidance to regulate both stormwater quality and quantity associated with new and redevelopment activities. Specifically in the Interlachen area, review new development permit applications for appropriate stormwater quality and quantity controls. Implement appropriate stormwater controls (e.g., pollution plates on inlets, storage facilities, filtration inlets) throughout the County area. Apply County flood development standards for all new public and private new and redevelopment.</p>	<p>Implement localized design standards to adequately address stormwater quality and quantity issues throughout the permit area. Promote safe and sustainable development within the regulatory floodplains and floodways as defined by the 100-year flood boundaries.</p>	<p>Land Use Planning Right-of-Way Permits Road Engineering Bridge Engineering</p>	<ul style="list-style-type: none"> • No activity to report 	<ul style="list-style-type: none"> • Record evaluation of new standards. • Track the percentage for permit applications reviewed by County engineering staff to indicate if the design standards are met. • Conduct plan checks to ensure drainage standards are used. 	<p>New Draft: The task to review the new Portland standards and consider their adoption was removed because the task was completed. The task to continue to review driveway connections to the ROW and permit for cross culverts was also removed. As this activity is still conducted, it was not relevant as a water quality BMP.</p>
<p>Structural Controls (STR). These activities are designed to implement structural modifications (constructed facilities) to existing systems/development to reduce pollutants in discharges from the municipal separate storm sewer system.</p>				<p>New measurable goals are proposed for in the new draft of the SWMP.</p>	
<p>STR1. <u>Address water quality with new capital or roadway improvement projects.</u> Ensure that any capital improvement or road construction project considers long-term water quality protection, where feasible. Review the plans, design, and purpose of such stormwater quality treatment facilities.</p>	<p>Ensure that water quality facilities, built as part of a drainage/flood control capital improvement project or road construction project apply appropriate design standards to reduce the discharge of pollutants from sites to the maximum extent practicable.</p>	<p>Road Engineering Bridge Engineering</p>	<ul style="list-style-type: none"> • No activity to report 	<ul style="list-style-type: none"> • Track the number of stormwater treatment facilities installed as part of capital or road way improvement projects. • Keep records of design/permit reviews. 	<p>On Schedule No modifications</p>

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
	Apply consistent practices in addressing water quality impacts.				
STR2. <u>Retrofit existing facilities for water quality benefit.</u> When major repair is needed, develop and implement retrofit of existing public drainage and flood control facilities (sumps, retention basins, drainage channels, bioswales, trash racks, sediment trap devices, etc.) where practicable to improve water quality. Install new systems according to current standards.	Continue sump replacement and retrofit of flood control facilities to improve pollutant reduction aspects of existing drainage and flood control facilities.	Road Engineering Bridge Engineering	<ul style="list-style-type: none"> No activity to report 	<ul style="list-style-type: none"> Record retrofit progress. 	On Schedule. No modifications.
STR3. <u>Inventory and map the County storm sewer system.</u> Improve knowledge of the County system to facilitate identification of problem areas and implementation of control programs in strategic locations. Allocate staff resources to ensure continued map updates.	Ensure County storm sewer mapping is accurate. This BMP supports the MS4 by providing valuable information allowing the County to effectively accomplish other elements of the NPDES permit requirements.	Road Engineering Bridge Engineering Road Maintenance	<ul style="list-style-type: none"> Water Quality and Bridge Engineering staff reviewed the GIS infrastructure layer and updated the outfall locations. 	<ul style="list-style-type: none"> Keep records of map updates. 	On schedule No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
<p>Natural System (NS). These activities are designed to help preserve and restore the natural environment/functions to reduce pollutants in discharges from the municipal separate storm sewer system.</p>			<p>New measurable goals are proposed for in the new draft of the SWMP.</p>		
<p>NS1. <u>Conduct vegetative management activities.</u> Continue to implement vegetation management procedures as in the Road Maintenance and Operations Manual (RMOM) to assure that water quality impacts are addressed. Include annual Oregon Department of Agriculture and EPA certification for pesticide applicators. Selectively use pesticides wherever applicable. Continue to improve application practices and train personnel to reduce pollutants to the maximum extent practicable.</p>	<p>Implement existing/improved practices to ensure that pollutants discharged from and into County rights-of-way (roads, ditches) are reduced to the maximum extent practicable.</p>	<p>Road Maintenance Bridge Maintenance</p>	<ul style="list-style-type: none"> • Bridge section continues to maintain vegetation on bridge abutments when necessary. 	<ul style="list-style-type: none"> • Review activities annually and determine if activities are conducted in accordance with the Road Maintenance Operations Manual. • Review activities annually and determine the success of integrated vegetation management techniques. • Keep records of employees who are certified pesticide applicators including continuing education units completed. 	<p>New Draft: Two tasks were added to this BMP: the first task was to selectively target invasive species for control; the second task was to review and update the Integrated Vegetation Management Program (IVM) during the permit term</p>
<p>NS2. <u>Encourage the use of native vegetation.</u> Promote the use of native vegetation on public and private projects. Utilize existing native plant lists for development review. Encourage use of self-sustaining native vegetation as well as Green Street Design practices which reduces the need for pesticides, fertilizers and water.</p>	<p>Reduce pesticide use and encourage use of self-sustaining vegetation as means of improving water quality.</p>	<p>Land Use & Transportation Planning Bridge Engineering & Maintenance Road Engineering & Maintenance</p>	<ul style="list-style-type: none"> • <i>Limited applicability in Permit area only in bridge right-of-way. The County no longer has planning or zoning authority within the permit area.</i> • <i>No activity of this BMP in the permit area.</i> 	<ul style="list-style-type: none"> • Implementation monitoring and compliance with vegetation plan. • Track number of permitted projects. 	<p>On schedule. No modifications.</p>

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
Program Management (PM). These activities are designed to ensure effective program management, coordination and reporting.			New measurable goals are proposed for in the new draft of the SWMP.		
PM1. <u>Stormwater program management.</u> Develop and manage the Stormwater Program to ensure compliance with the NPDES permit. Implement cost-effective, practical BMPs and activities that are designed to reduce stormwater pollution to “the maximum extent practicable,” given the County’s unique jurisdiction.	Develop and manage the County’s stormwater program to ensure compliance with the NPDES permit. Develop and implement cost-effective, practical BMPs and activities that are designed to reduce stormwater pollution to the “maximum extent practicable.”	Program Management	<ul style="list-style-type: none"> Utilized e-mail to provide program updates to functional group members. Managed record keeping system for use by the County staff to track work done in the field, meetings attended, etc. 	<ul style="list-style-type: none"> Keep records of water meetings attended. Evaluate sufficiency of BMP program reporting by functional groups. 	On schedule. No modifications.
PM2. <u>Assess and evaluate the stormwater BMP program.</u> on a continuous basis assess and evaluate the BMP program to ensure use available resources, and make recommendations for improvements in program implementation tasks. Designate County staff to compile/summarize records for each BMP. Utilize BMP record-keeping system for evaluation of progress at regular work sessions with Stormwater Implementation Team.	Assess and evaluate program to ensure the best use of available resources and make recommendations for continuous improvement.	Program Management	<ul style="list-style-type: none"> Water Quality staff attended NPDES co-permittee meetings to discuss revision of County NPDES BMPs for permit renewal. Water Quality staff attended City of Portland Stormwater Advisory Committee meetings to discuss new measurable goals in Stormwater Management Plan. Water Quality staff has submitted a revised Stormwater Management Plan with the current permit renewal submittal package to DEQ. 	<ul style="list-style-type: none"> Keep records of work sessions, including training, evaluation process and results. 	On Schedule. No modifications.
PM3. <u>Maintain field records.</u> Continue to keep field records of maintenance activities Review annually and update as needed the Road Maintenance Operations Manual (RMOM), including procedures regarding water quality impacts to receiving streams based on the records of maintenance activities.	Use record keeping to track performance of BMPs over-time and to determine level of water quality protection provided. Adjust Stormwater Program and associated guidance manuals through adaptive management based on results reported in annual reports.	All functional groups	<ul style="list-style-type: none"> Road Maintenance staff enters BMP activity into the Road Information Systems database on a daily basis. BMP reports are entered in the Environmental Management database by all other functional groups. 	<ul style="list-style-type: none"> Staff review of field logs. 	On schedule. No modifications.

IV. STORMWATER MANAGEMENT PROGRAM BUDGET

Program activity within the Portland Permit area for Permit year 13 is primarily associated with the Department of Community Services – Land Use and Transportation Program.

Bridge Maintenance expenditures and anticipated budget allocations within the Portland Permit area incorporate items including, drainage maintenance, right-of-way, surface management, vegetation management, general administration, emergency road hazard response and training.

Bridge Engineering expenditures and anticipated budget allocations within the Portland Permit area incorporate drainage studies and reviews, environmental compliance review, as-built plan drafting and inventory, GIS database entry, and training.

Multnomah County Road Maintenance, through an Intergovernmental Agreement, contracts with the City of Portland to maintain and operate County owned roads consistent with applicable operations and maintenance best management practices as set forth in the City of Portland Stormwater Management Plan of the 1993 City of Portland National Pollution Discharge Elimination System Municipal Stormwater permit.

Road Engineering continues to retain authority to review access and impacts to the right-of-way including stormwater discharge when such discharges cannot be retained on site. Discharge from the undeveloped parcel is calculated and only that volume is permitted for access to County road drainages. There were only a handful of reviews conducted during permit year twelve.

Transportation Planning within the Portland Permit area includes development review in the unincorporated pockets where such development has the potential to access or impact the county right-of-way.

Funding sources for stormwater program expenditures are derived from the County general fund for the Land Use Planning program. The Transportation Division receives funding from the State Highway Trust Fund: revenue from this source include the State gasoline tax, weight/mile tax on trucks, and vehicle registration fees, which are constitutionally dedicated to road related issues.

The table below outlines program expenditures for PY 13 (Fiscal Year 2007-2008).and provides the anticipated budget for PY 14 (Fiscal Year 2008-2009).

Portland Permit Area Budget

Program Area	PY 13 Expenditures	PY 14 Anticipated Budget
Water Quality Program ¹	\$53,254	\$122,900
Bridge Maintenance/Operations	\$34,200	\$36,300
Bridge Engineering ²	\$15,326,600	\$18,994,000
Road Maintenance IGA	\$158,000	\$158,000
Road Engineering	\$8,800	\$9,100
Transportation Planning	\$2,250	\$2,750

¹The increase is attributed to a reformulation in this value due to a position change within the organization, and not a significant reallocation of resources.

²The amount shown represents the entire Bridge Engineering program. The entire program is included because we do not budget or collect charges for water quality tasks. Water quality best practices are integral in all aspects of design and construction and hence we are not able to be segregated from the other work.

V. MONITORING

The City of Portland performs this component of the Stormwater Management Plan within the Permit Area. Please refer to the City of Portland annual report for a summary of data including monitoring data accumulated throughout the reporting year, and identification of water quality improvements of degradation.

VI. OVERVIEW OF LAND USE CHANGES

The Permit under Schedule B(2)(a)(viii) of Permit No. 101315 provides; “An overview, as related to MS4 discharges, of concept planning, land use changes and new development activities that occurred within UGB expansion areas during the previous year, those forecast for the following year, and an evaluation for consistency with the requirements of Schedule D(2)(c)(i)(2).” The county has not had any land use changes that apply to the Portland Permit Area during this Permit Year.

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MEMORANDUM

To: File

FR: Sandra Duffy, Assistant County Attorney

DA: September 6, 2007

RE: Demonstration of Continued Legal Authority to Implement the Programs Outlined in the County Stormwater Management Plan

I have been asked by the Environmental Compliance Division to review the county's legal authority to implement the programs outlined in the stormwater management plan. My review included Chapters 11, 15, and 27 as those provisions pertain to stormwater issues.

I have reviewed these code provisions and have determined that Multnomah County has adequate legal authority as required by 40 CFR 122.26(d)(2)(i). Attached is a table that summarizes these requirement and the applicable Multnomah County Code provisions.

Multnomah County

Adequate Legal Authority

Requirement	Code Authority
Control through ordinance, permit contract, order or similar means, the contribution of pollutants to the municipal storm sewer by storm water <i>discharges associated with industrial activity</i> and the quality of storm water discharged from sites of industrial activity.	The County does not have industrial zoning within the permit area. However, MCC 27.764; MCC 27.768 provide general discharge regulations and limitations. MCC 11.15 (erosion control) provides the ability to require discharger to implement source controls. MCC 15.225- MCC 15.235 prohibits dumping and nuisances generally. MCC 37.0945 provides authority to enforce the prohibition of discharge of pollutants into waters of the state that violate water quality standards.
Prohibit through ordinance, order or similar means, <i>illicit discharges</i> to the municipal separate storm sewer.	MCC 27.773 provides for the prevention or termination of an illicit discharge to the storm sewer system. MCC 27.781 requires separation of the sanitary sewer system from the storm sewer system. MCC 15.225- MCC 15.235 prohibits dumping and nuisances generally.
Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of <i>spills, dumping or disposal of materials other than storm water</i> .	MCC 15.235 prohibits dumping and nuisances generally. MCC 27.772 and MCC 15.225 prohibit spills or dumping of any material other than stormwater to the municipal separate storm sewer.
Control through interagency agreements among the co-permittees the contribution of pollutants form one portion of the municipal system to another portion of the municipal system.	A cooperative monitoring and stormwater management program exists between Multnomah County and the City of Gresham formalized in June 2004. Intergovernmental Agreements related to County roads and associated drainage exist between the County and the cities of Fairview and Gresham.
Require compliance with conditions in ordinances, permits, contracts or orders.	MCC 37.0910, 18.450, 27.773 and MCC 15.230 provide for the enforcement of permits, ordinances or orders.
Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer.	MCC 37.0910, 18.450, and MCC 15.230 provide for the investigation and enforcement of permits, ordinances or orders.



**MULTNOMAH
COUNTY**

**Multnomah County
Municipal NPDES Annual Report
Permit Year 13
July 1, 2007 – June 30, 2008
Gresham Area Permit #101315**

Submitted November 1, 2008

Water Quality Program
Land Use and Transportation Division
Department of Community Services
Multnomah County

I. INTRODUCTION

Multnomah County has implemented a comprehensive countywide stormwater management program since the issuance of the first Municipal Separate Storm Sewer System (MS4) NPDES permit in 1995. The goal of the program is to reduce pollutants in stormwater runoff to the maximum extent practicable. The program is maintained and prioritized in response to federal Clean Water Act requirements and the County's responsibility to protect the health and welfare of its citizens. The County is a co-permittee on two separate MS4 NPDES permits, one for the Portland area, and another for the Gresham area.

The stormwater management program consists primarily of Stormwater Management Plan (SWMP), which is implemented countywide. This plan is submitted to and approved by the Oregon Department of Environmental Quality (DEQ) under the NPDES permit. The County's roles and responsibilities for complying with the permit term falls under seven categories of Best Management Practices (BMPs) with a focus on operating and maintaining the County bridges and roads.

This Compliance Report for Permit Year 13 (July 1, 2007 through June 30, 2008) documents the implementation activities of Multnomah County's Stormwater Management Program in the Gresham/Fairview NPDES permit area. For a full discussion of monitoring completed for this permit, please refer to the NPDES Annual Compliance Report Permit Year 13, submitted by the City of Gresham.

The permit renewal process began during this Permit Year, which included an evaluation of the Stormwater Management Plan (SWMP). The evaluation led to a few changes to individual BMPs and new measurable goals. Generally, the changes were not substantive but were made to consolidate information where it was repetitive, eliminate information that was not relevant, remove information that was outdated, and improve the readability of the document. The rationale for the changes in the plan are given in the table in Section III, as well as in the Draft SWMP submitted to DEQ.

Description of the County's Permit Area

The City of Gresham, City of Fairview and Multnomah County own and operate a portion of the MS4 within the Gresham/Fairview Urban Services Boundary. Multnomah County is responsible for a small percentage of unincorporated land within the Gresham/Fairview permit area, known as Interlachen, and 10.5 miles of roadway with stormwater infrastructure within the City of Fairview. Interlachen is the residential area between Blue Lake and Fairview Lake.

When the original NPDES Permit application was submitted in May 1993, the County had jurisdiction over certain roadways within the City of Gresham. Since then, all County roads and associated drainage within Gresham have been transferred to the City (July 1995 and January 1, 2006). Additionally, the County transferred land use planning authority for the Reynolds Aluminum urban unincorporated area to the City of Troutdale pursuant to an Urban Planning Area Agreement during PY 7. This compliance report incorporates those changes and diminished area of responsibility.

II. STORMWATER MANAGEMENT PLAN OVERVIEW

The Multnomah County Stormwater Management Plan is a set of Best Management Practices (BMPs) designed to reduce stormwater pollutants to the maximum extent practicable. The County's stormwater management plan is made up of thirty-five BMPs grouped into seven categories as shown below:

- Public Involvement and Education (PI);
- Operations and Maintenance (OM);
- Illicit Discharges Control (ILL);
- New Development Standards (ND);
- Structural Controls (STR);
- Natural Systems (NS); and
- Program Management (PM).

The plan includes a variety of structural and non-structural controls in managing stormwater; however, not all BMPs apply within the Gresham permit area.

BMP Categories

Public Involvement and Education (PI)

The Public Involvement and Education BMPs are designed to inform and educate the public about the causes of stormwater pollution, the effects on local streams and rivers, and the need for stormwater management, and to encourage active participation in pollution reduction efforts.

Operations and Maintenance (OM)

Several activities are conducted by the County to address stormwater quality impacts from routine operations and maintenance activities both inside and outside the permit area. The County's Road Maintenance and Operation Manual describes the various maintenance

activities performed by the County related to roadways and associated storm drainage facilities. The manual includes procedures for routine inspection and maintenance of facilities with the dual purpose of providing flood control and protecting water quality. A series of field logs are used along with the manual for use in tracking progress of the maintenance program and evaluating effectiveness over time. The County provides continued training to staff regarding record keeping and reporting requirements. County staff assesses the effectiveness of maintenance and adjusts methods and/or frequencies as needed to improve stormwater quality.

Illicit Discharges Control (ILL)

Illicit Discharges Control BMPs are designed to reduce the frequency and impact of accidental non-stormwater discharges to the stormwater system, and to control illicit connections to the MS4. Noticeable illicit discharges are reported to the appropriate agency for follow up action. Examples of this are private truck hauling practices, excessive littering, illicit connections, illegal dumping, and other leaks, spills or release of contaminants.

New Development Standards (ND)

New Development Standards (ND) BMPs are designed to mitigate pollutant discharges and other water quality impacts associated with new development and redevelopment during and after construction.

Much of Multnomah County's jurisdiction in the original permit area has been annexed or transferred to by the Cities of Portland, Gresham, and Troutdale, since the first permit term. There is no unincorporated area within the permit area containing industrial or commercial facilities or park land.

Structural Controls (STR)

These BMPs are designed to implement structural modifications (constructed facilities) to existing systems/development to reduce pollutants in discharges from the municipal separate storm sewer system.

Natural System (NS)

These BMPs are designed to help preserve and restore the natural environment/functions to reduce pollutants in discharges from the municipal separate storm sewer system.

Program Management (PM)

Program Management BMPs ensure effective program management, coordination, and reporting. The County implements several other activities required by the NPDES regulations and additional activities in order to ensure the proper management and success of the program.

Functional Groups

Managers and staff in the Multnomah County Department of Community Services, Land Use and Transportation Division are organized into “functional groups” to implement the Stormwater Management Program. The functional groups are assigned specific BMPs, as described below:

- Public Affairs
- Bridge Engineering
- Bridge Maintenance
- Land Use and Transportation Planning
- Environmental Compliance
- Emergency Response
- Right-of Way Permits
- Road Maintenance
- Road Engineering
- Program Management

III. Best Management Practices Summary of Activity

Annual Compliance Reports for the Municipal NPDES Stormwater Permit are required to include information relating to each BMP task and schedule. B(2)(a)(i) The following matrix provides this information, in summary form, for each BMP. More detail is available upon request through documentation in the Multnomah County Land Use and Transportation Program of the Department of Community Services.

The following matrix provides the following information:

- A short description of the Best Management Practice, with BMP Number.
- The overall intent, goals and objectives of the Best Management Practice.
- The Multnomah County 'functional group(s)' designated as responsible for BMP Implementation.
- Key accomplishments for Permit Year 13, including a summary of describing the number and nature of enforcement actions, inspections, and public education programs.
- Assessment of Controls.
- Any proposed modifications or changes to the schedule or activities

Best Management Practices (BMPs) Matrix for Permit Year 13

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
Public Involvement and Education (PI) These activities are designed to inform and educate the public about the causes of stormwater pollution, the effects on local streams and rivers, and the need for stormwater management and to encourage active participation in pollution reduction efforts.				New measurable goals are proposed for in the new draft of the SWMP.	
PI1. Participate in <u>Regional Public Education Efforts</u> . Continue support and direct participation for public involvement and public education campaigns.	Participate with regional entities and cities in coordinating new and existing efforts to educate and inform the public about stormwater pollution problems, and to involve the public in developing stormwater pollution prevention programs. The County will provide support for the various public involvement and education activities provided by the Regional Coalition of Clean Rivers and Streams. The County will make staff and materials available as requested and practicable, and will grant volunteers and other clean-up groups access to the County right-of-way whenever feasible.	Public Affairs	<ul style="list-style-type: none"> • The Regional Coalition for Clean Rivers & Streams focused this year's efforts to broadcast a television commercial encouraging the public to adopt habits at home and in their community that reduce stormwater pollution and improve the health of local rivers and streams. The ad ran on cable television stations that focus on home and garden interests. • Public Affairs staff participated in the reviews of the Coalition's website redesign project. The goal was to create a more interactive and simplified presentation with stronger, more cohesive visuals. The new website was launched in 2008, producing interest in the news media and an increase in traffic to the website. Public Affairs staff helped to promote the website to internal and external audiences. 	<ul style="list-style-type: none"> • Notes of meetings and annual report. • Participation in the coalition and evaluation of campaigns. 	On schedule. No modifications.
PI2. <u>Participate in Public Meetings</u> . Present information to public regarding Multnomah County programs and regulation, particularly water quality program.	Educate the public about the County's role in protecting stormwater quality and the opportunities for public participation in pollution prevention as well as public involvement and education on stormwater pollution problems by attending public meetings.	Program Management	<ul style="list-style-type: none"> • Water Quality staff attended meetings of the Sandy River Watershed Council, Sandy River Basin Partners, Columbia Slough Watershed Council. • Water Quality staff attended a meeting of the Sandy River Agricultural Water Quality Management Area Local Advisory Committee to discuss instream monitoring issues. 	<ul style="list-style-type: none"> • Notes and records of meeting attendance. 	On Schedule. No modification.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
<p>PI3. <u>Distribute public education information regarding stormwater.</u> Brochures and educational materials at County offices, public water quality events, and maintenance of County Water Quality Program website.</p>	<p>Provide information to educate and inform the public about stormwater pollution problems and to encourage public involvement in stormwater pollution prevention programs.</p>	<p>Program Management</p>	<ul style="list-style-type: none"> • County participated at the 2007 Salmon Festival at Oxbow Park. County staff and volunteers staffed a booth with a working watershed model and other activities to learn about salmon and watershed health. • Various water quality BMP fact sheets are made available in County offices. • County's Water Quality website was updated. 	<ul style="list-style-type: none"> • Estimate number of brochures and educational materials. • Consider most effective venues for distribution of materials. 	<p>New Draft: The task to develop and implement a distribution strategy was removed because the County has limited outlets for materials for other agencies material and the County relies on other entities for public education programs. A new task was added to ensure that the educational materials that are distributed are current and cover relevant topics</p>
<p>PI4. <u>Training and education for County personnel</u> about impacts of on-the-job activities to the MS4, and how to minimize impacts to receiving streams. Include erosion control seminars, stormwater maintenance activities, inspection practices, construction BMPs, and other activities for in-house and field personnel. Include training and education relating to water quality learned in conferences. In addition, educate County staff about the public's role in protecting water quality on a watershed-wide basis.</p>	<p>Through training of County staff, minimize/eliminate the impact of on-the-job activities to the MS4 and stormwater quality.</p>	<p>All Functional Groups</p>	<ul style="list-style-type: none"> • Water Quality staff attended an ODOT Erosion Control Training. • Vegetation Management staff continued to attend regular meetings of the Cooperative Weed Management Areas group, in addition to local knotweed and garlic mustard control meetings. • Water Quality staff conducted new Road Maintenance staff orientation on environmental regulations and compliance, including stormwater management and ESA issues. • Water Quality staff gave an environmental regulation update and review for all Road Services staff. • Road Maintenance staff attended Emergency Spill Response Annual training. 	<ul style="list-style-type: none"> • Track attendance at water quality conferences, trainings, etc. • Track educational material disseminated to staff. • Keep records of trainings provided. 	<p>New Draft: The task to disseminate new training materials was removed because this task is already implicit in the task that is under this BMP to conduct training on new approaches to water quality protection.</p>

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
PI5. Implement the Multnomah County <u>Adopt-A-Road program</u> to promote public awareness of litter control and impacts to roads and waterways. Increase use of volunteers and track work by volunteers, including County inmate work crews.	Educate the public regarding the storm water pollution that results from littering. Work with citizen action programs to facilitate efforts to reduce littering.	Road Maintenance	<ul style="list-style-type: none"> • 28 groups participated in our Adopt-a-road program during 2007-2008. 11 of the groups did not ask for any resources from the County except for trash bags. The County issued the safety equipment, trash bags, and provided litter pick up for 17 groups. Outings ranged from once a year to twice a month, with most groups conducting 3-4 outings per year. One person participates on her daily walk. • 5 groups participated on roads that were transferred to Gresham. These groups now participate under Gresham Adopt-a-Road program. 	<ul style="list-style-type: none"> • Review and evaluate field logs for correct implementation of BMPs. 	New Draft: The task to utilize inmate crews to pick up trash bags was removed because this is a consistent element of the program, not subject to change. This task was incorporated into a broader task of program support. Two tasks were also added: the first to promote the adopt-a-road program, and the second to provide program support such as providing equipment and coordination for volunteers.
PI6. Implement <u>Signage Programs</u> to Protect Stormwater Quality to promote public awareness of the importance of keeping pollutants out of storm drains as opportunities arise.	Reduce/eliminate the illicit discharges into street storm drains to protect water quality by reducing illicit discharges and impact by the public. Educate the public about drainage ways, impacts to streams from storm sewer systems, and watershed awareness.	Road Maintenance	<ul style="list-style-type: none"> • A plan to inspect storm drain markers was discussed to follow with new GIS stormwater layer development. 	<ul style="list-style-type: none"> • Review conveyance system inspection logs annually to determine if increased public awareness has decreased illicit discharges of the pollutants of concern. • When requested to install signage track response time to post. 	On schedule. No modification
PI7. <u>Maintain Public Involvement during the CIP Process.</u> Ensure public involvement during two-year update process for Capital Improvement Plan and Program that addresses stormwater quality impacts and issues. Identify NPDES drainage issues and remedies on Capital Improvement Plan project scope sheets. Include in project atlas during public review process	Improve public awareness of properly designed stormwater facilities' ability to remove pollutants and protect water quality.	Transportation Planning	<ul style="list-style-type: none"> • No new projects were added to the CIP during 2007-2008, and therefore the full public process not conducted. However, the CIP budget was reviewed and approved at a public meeting of the East Multnomah County Transportation Committee. 	<ul style="list-style-type: none"> • Record involvement in public meetings through regular CIP process. 	On schedule. No modifications.

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P18. <u>Facilitate Public Reporting of Illicit Discharges including illegal dumping</u> of pollutants, trash, or illegal fill (dirt/soil).	Control illicit discharges from illegal dumping to protect water quality.	Emergency Response Road Maintenance Bridge Maintenance Right-of-Way Permits	<ul style="list-style-type: none"> No activity to report in permit area. 	<ul style="list-style-type: none"> Keep records of how problems are being corrected. 	On schedule. No modifications.

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<p>Operations and Maintenance (OM) These activities are designed for the Implementation of operations and maintenance practices for public streets, bridges, storm sewers and other facilities to reduce pollutants in discharges from the municipal separate storm sewer system.</p>				<p>New measurable goals are proposed for in the new draft of the SWMP.</p>	<p>New Draft: <i>Review the RMOM for Potential Updates to Address Water Quality:</i> This is a new BMP that was added to the SWMP. RMOM is the County Road Maintenance and Operations Manual that provides guidance with respect to conducting road maintenance activities using procedures that minimize impacts to water quality. The County operations and maintenance BMPs are all conducted according to RMOM guidance. Therefore, this BMP was added to ensure that RMOM continues to stay up-to-date as the most appropriate guidance for the County with respect to water quality.</p>
<p>OM1. <u>Inspect and maintain the Storm Drainage System</u> including inlets, catch basins, water quality facilities and stormwater conveyance system on a regular basis</p>	<p>Ensure that inlets, catch basins, sumps and stormwater conveyance system are maintained in a manner that reduces pollutants to the maximum extent practicable. Continue to review and revise operations and maintenance procedures as appropriate.</p>	<p>Road Maintenance</p>	<p>The following data is a total of work effort in the Fairview, Wood Village and Troutdale area. (Wood Village and Troutdale are outside the permit area.)</p> <ul style="list-style-type: none"> • 467 catch basins cleaned mechanically using a Vactor™ machine. • 30.4 cubic yards of material collected and prevented from entering the stormwater system from catch basins. • 20 cubic yards of debris was collected from 250 feet of ditches. • Stormwater conveyance system inspected as part of routine maintenance practice. 	<ul style="list-style-type: none"> • Review Field Logs to check that RMOM schedule and procedures have been followed. • Review the records on a semiannual basis to evaluate the effectiveness of current practices and to help locate priority areas that may require more attention. Identify these areas on maps for use in planning future operations. 	<p>New Draft: The task to inspect sweeping equipment was removed because it is a routine activity covered under the Road Maintenance and Operations Manual.</p>

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<p>OM2. <u>Conduct street sweeping</u> to include scheduled sweeping, equipment review, and training on a regular basis. Revise and update schedule, equipment, and training as necessary.</p>	<p>The objective of the street sweeping program for county roads is to reduce materials on the roadway and impacts to the stormwater system. The County will continue to review and revise the program and schedule and make improvements as appropriate.</p>	<p>Road Maintenance</p>	<p>The following data is a total of work effort in the Fairview, Wood Village and Troutdale area. (Wood Village and Troutdale are outside the permit area.)</p> <ul style="list-style-type: none"> • 142.7 lane miles were swept within the permit area. • 69 cubic yards of road waste materials collected and prevented from access to County and co-permittee stormwater systems. 	<ul style="list-style-type: none"> • Road Maintenance staff use Street Sweeping field logs to document and track these activities. • Maintenance and cleaning activities entered into a database. Trends in increase/decrease of pollutant/debris accumulation are monitored. 	<p>On schedule. No modifications.</p>
<p>OM3. <u>Properly dispose of road waste material.</u> Record amounts and location of material disposed. Test for disposal using an independent lab and record/file test results. Review different disposal procedures for street sweeping vs. Vactor pad materials. Continue to investigate feasibility of decant facility for County waste materials. Work cooperatively among County divisions to reduce water quality impacts of site handling, storage, and disposal areas for material collected during road maintenance activities. The County has adopted DEQ/ODOT Road Waste Management Practices.</p>	<p>The objective of the road waste disposal operations for county roads is to reduce materials on the roadway and impacts to the stormwater system. The goal is to identify and implement practices for disposal of road waste materials that protect water quality. Monitor if current outdoor storage activities are contributing sediments to stormwater runoff. Recommend practices to control discharges as needed.</p>	<p>Road Maintenance Emergency Response</p>	<ul style="list-style-type: none"> • Vactor waste from catch basins and sumps was decanted at the County's Vance Pit facility. Samples are analyzed prior to disposal by incineration. • The County is reviewing direct disposal options for Vactor waste to eliminate the use of the decant facility and transfer of waste materials. • Road waste material from street sweeping, culverts, storm lines and ditches was temporarily stockpiled at the Vance Pit facility, and transferred to the Coffin Butte waste disposal facility. 	<ul style="list-style-type: none"> • Review records and study results, implement recommendations as practicable. 	<p>On schedule. No modifications.</p>
<p>OM4. <u>Evaluate anti-icing operations.</u> Investigate the potential to reduce the use of sanding materials for seasonal anti-icing operations. Continue testing of alternative anti-icing methods and materials (e.g., CMA). Prohibit the use of salt or glycol on the roadways. Collect sanding material distributed during storm events as soon as feasible. Continue collection and recycling of sand throughout the County's portion of the permit area.</p>	<p>Reduce harmful effects of roadway anti-icing activities and materials on water quality by proper sand collection methods and by prohibiting the use of glycol and salt.</p>	<p>Road Maintenance</p>	<p>The following data is a total of work effort in the Fairview, Wood Village and Troutdale area. (Wood Village and Troutdale are outside the permit area.)</p> <ul style="list-style-type: none"> • Road Maintenance continued using Calcium Magnesium Acetate (CMA) as an alternative for salt for de-icing. • 10.3 lane miles applied with 252 gal of CMA solution. 	<ul style="list-style-type: none"> • Review Street Sweeping Log (Field Log #1) and other field reporting logs to determine whether a significant amount of sanding material is found in catch basins and ditches, etc., when routine cleaning operations are conducted that would indicate the material collection and storage practices are insufficient 	<p>New Draft: Tasks to prohibit the use of salt and glycol and to procure funding for the anti-icing program were removed because these are policies rather than actual tasks.</p>

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<p>OM5. <u>Regulate truck hauling practices to minimize pollutant discharges.</u> Review practices with field crews annually. Recommend revisions (if necessary) to limit occurrence of leaks, spills, or other releases. Continue to test and evaluate asphalt release agents for truck and tool cleanup, which use “environmentally-friendly” products.</p>	<p>Control discharges from truck hauling activities to the extent that they are impacting County right-of-way and/or the municipal separate storm sewer system.</p>	<p>Road Maintenance</p>	<ul style="list-style-type: none"> • One incident of a broken hydraulic line on a tractor broom was reported. The hydraulic spill was immediately cleaned up, and the equipment was repaired. • Road Maintenance entered into a contract with ECI Inc. to perform ice blasting cleaning of the oil distributor truck. Ice blasting will eliminate the use of solvents to clean the equipment. Ice and removed build-up is contained in a plastic sheet and disposed by the contractor. 	<ul style="list-style-type: none"> • Monitor number of problems, and response time to address observed problems. • Determine if occurrences of releases are occurring frequently or infrequently. Determine if problems are due to equipment, or due to personnel. Is more training needed? • Determine the potential water quality impacts of new products considered for use. 	<p>New Draft: Tasks relating to staff training and reviewing new product specifications were removed as these are already covered under either BMP PI – 4 (Conduct Training and Education for County Personnel), or BMP OM-1 (Review the RMOM for Potential Updates to Address Water Quality).</p>
<p>OM6. <u>Perform culvert maintenance by inspecting and maintaining culverts in ways that minimize impacts to water quality.</u> Consider opportunities to retrofit culverts to provide better water quality treatment. Continue to maintain culvert inventories. Make distinction as to whether culverts are fish passage culverts and adhere to appropriate maintenance procedure.</p>	<p>Determine if the frequency of current operation and maintenance practices allows for reduction of pollutants to the maximum extent practicable. Improve and retrofit as needed.</p>	<p>Road Maintenance</p>	<ul style="list-style-type: none"> • Two failed driveway culverts and one cross culvert were replaced during the permit term. All three culverts are stormwater culverts that connect ditches, not instream culverts. 	<ul style="list-style-type: none"> • Track number of new versus recurring problems to determine if problems are being identified and addressed over time. • Review with Road District Supervisors whether culverts are maintained properly and how to change practices to address water quality. 	<p>New Draft: This BMP was removed altogether as maintaining culverts is not a water quality measure. However, it is important to conduct culvert maintenance activities using procedures that minimize water quality impacts. These procedures are implemented by the County as already provided for in RMOM under BMP OM-1. Therefore, this BMP description was no longer needed.</p>
<p>OM7. <u>Conduct right-of-way and road shoulders maintenance</u> in ways that avoid and prevent future adverse water quality impacts. Continue review of current maintenance practices.</p>	<p>The purpose of this BMP is to control and reduce the amount of sediments discharged to the receiving waters via the right-of-way. Sediments attract and adhere to other pollutants (heavy metals, oil/grease) and increased turbidity/sedimentation on channel bottoms impairs water quality and fish habitat.</p>	<p>Road Maintenance</p>	<ul style="list-style-type: none"> • One incident of road shoulder repair was reported on Foster Road (outside the permit area). 	<ul style="list-style-type: none"> • Field logs used to document road shoulder conditions. • Document meetings with Road Maintenance District Supervisors that include discussions of maintenance practices in rights of way. Make changes in RMOM if necessary. 	<p>On schedule. No modifications.</p>

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<p>OM8. <u>Conduct ditch maintenance.</u> Review frequency and timing of ditch cleaning in areas where sediment and/or debris tend to accumulate. Determine if the frequency and timing of current ditch maintenance practices allows for reduction of pollutants and minimizes the impact on ditch surface. (If not, recommend and implement improved frequencies, timing, and/or type of equipment to minimize damage to ditch bottom.) Using records, determine where improvements are needed to reduce discharges to ditches.</p>	<p>Control/reduce amount of sediments and pollutants discharged to the receiving waters. Sediments attract and adhere to other pollutants (heavy metals, oil/grease) and increased turbidity/sedimentation on channel bottoms impairs water quality and fish habitat.</p>	<p>Road Maintenance</p>	<ul style="list-style-type: none"> • 250 ft of ditch length was cleaned and 20 cubic yards of debris was collected. 	<ul style="list-style-type: none"> • Review field logs on an annual basis. Ensure each district is participating at sufficient frequency levels to reduce pollutants to the maximum extent practicable. 	<p>On schedule. No modifications.</p>
<p>Illicit Discharges Control (ILL), These activities are designed to prevent, identify, investigate, and if appropriate, control/eliminate any non-stormwater discharges into the municipal separate storm sewer system.</p>				<p>New measurable goals are proposed for in the new draft of the SWMP.</p>	
<p>ILL1. <u>Interagency coordination on spill response.</u> Continue to work with regional HAZMAT teams on policy matters concerning water quality impacts. Continue cooperative agreements with other agencies to ensure spills are responded to and cleaned quickly. If necessary, clarify and/or improve procedures to ensure effective interagency coordination and rapid response.</p>	<p>Improve procedures to ensure effective interagency coordination and communication, and rapid response.</p>	<p>Emergency Response</p>	<ul style="list-style-type: none"> • This BMP is no longer needed 	<ul style="list-style-type: none"> • No longer needed 	<p>New Draft: This BMP was removed as a spill response process has been developed and this BMP is no longer relevant.</p>

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<p>ILL2. <u>Implement Spill response in County areas.</u> Continue to manage the spill prevention and response program that reduces the frequency and impact of accidental non-stormwater discharges to the MS4. Revise County Road Maintenance Operation Manual (RMOM), if necessary, to include clear instructions for field personnel in the event of a spill. Improve use of absorbent materials for quick response to minor spills of oil or fluid. Keep records of incidents and response. Continue to coordinate response to appropriate incidents with cities.</p>	<p>Prevent spills to the maximum extent practicable. Respond to accidental non-stormwater discharges promptly to reduce the frequency and overall impact of spills to the stormwater system.</p>	<p>Emergency Response</p>	<ul style="list-style-type: none"> Road Maintenance crews responded to several minor spills from auto accidents and commercial equipment hydraulic leaks. The spills were contained easily and cleaned up using absorbent materials on board regular maintenance fleet trucks. No major spills occurred during the permit terms. 	<ul style="list-style-type: none"> Review logs on an annual basis. Review the RMOM as necessary to ensure revisions were made. Note evaluation in BMP file. 	<p>On schedule. No modifications.</p>
<p>ILL3. <u>Address spills from private truck haulers.</u> Review reporting of and action for noticeable private truck hauling practices causing discharges to County roads and the stormwater conveyance system. Work with County inspection officers for immediate response.</p>	<p>Control discharges from private hauling activities to the extent that they are impacting the County right-of-way.</p>	<p>Road and Bridge Engineering Right-of-Way Permits</p>	<ul style="list-style-type: none"> No activity to report in permit area. 	<ul style="list-style-type: none"> Construction inspectors monitor construction activities on a daily basis, with an emphasis on discharge control. Review agency response to reports by county staff. Work with agency to improve reporting and response procedures. 	<p>On schedule. No modifications.</p>

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<p>ILL4. <u>Erosion control for County contractors.</u> Implement requirements to control discharges from construction sites to ensure that construction practices do not release sediment and contaminants onto roadways or open space where they may be washed into storm drains or waterways. Continue to require erosion control measures in contract specifications. Continue to require cash deposits, performance-payment bonds, final inspections and other mechanisms to ensure compliance with permit requirements. Review erosion control permit requirements with contractors during projects. Inspect and review Erosion and Sediment Control Plans to ensure control of discharges. Continue pre-construction meetings to disseminate information about requirements to prevent damages during construction projects.</p>	<p>Assure that the design standards in place adequately address water quality issues throughout the permit area.</p>	<p>Road and Bridge Engineering Right-of-Way Permits</p>	<ul style="list-style-type: none"> No activity to report in permit area 	<ul style="list-style-type: none"> Records kept of Erosion and Sediment Control Plan (ESCP) inspection activities. Review contractor ESCP to ensure compliance. 	<p>New Draft: Added a task to include requirements for pollution controls in contracts for public projects that address additional non-sediment related discharges (e.g., paints, solvents, metals, etc.).</p>
<p>ILL5. <u>Pollution control for County and contractors.</u> Implement a program to reduce, eliminate or recycle discharges of all other pollutants (other than sediment) from road and bridge construction and related sites including county facilities (paints, solvents, metals, etc.). Establish or improve regulations or policy as necessary. Continue inspection as part of daily routine. Continue record-keeping system for reporting any incidents of pollutants or debris. Provide training program to staff to monitor for pollution control.</p>	<p>Eliminate/reduce discharge of all pollutants from construction sites which adversely impact stormwater and receiving water quality.</p>	<p>Transportation Program Sustainability</p>	<ul style="list-style-type: none"> No activity to report during permit term. 	<ul style="list-style-type: none"> Review annually, records kept by staff for the inspection and monitoring of construction sites. 	<p>This BMP was removed as the activities for this BMP were added to the BMP described above.</p>

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ILL6. <u>Identify and investigate Illicit discharges.</u> Continue to implement a program to identify and investigate illicit discharges (illegal dumping of pollutants including trash, fill, oil, or toxic materials) to the storm sewer system. Report and follow up on reports by County staff when illicit discharges are discovered during the course of job duties.	Eliminate/reduce discharge of all pollutants from construction sites which adversely impact stormwater and receiving water quality.	Emergency Response Right-of-Way Permits Compliance Road Maintenance Bridge Maintenance	<ul style="list-style-type: none"> No activity to report in permit area 	<ul style="list-style-type: none"> Track follow up and inspection activities. 	On schedule. No modifications.
ILL7. <u>Identify and investigate sanitary discharges to the storm sewer.</u> Continue to implement a program to identify and investigate sanitary discharges to the storm sewer system. Continue a reporting and follow up procedure for County staff to follow when a cross-connection or illicit connection is discovered during the course of job duties.	Identify and investigate any possible sanitary discharges in the storm system.	Right of Way Permits Bridge Maintenance Road Maintenance Compliance	<ul style="list-style-type: none"> No sanitary discharges to the storm sewer system reported within the Permit area. 	<ul style="list-style-type: none"> Track inspections of the operation of the sewage holding facility for prohibited discharge. 	On schedule. No modifications.
New Development Standards (ND) These activities are designed to mitigate pollutant discharges and other water quality impacts associated with new development and redevelopment during and after construction.				New measurable goals are proposed for in the new draft of the SWMP.	
ND1. <u>Coordinate transfer of land use planning authority</u> from the County to the cities, which ensures continuous application of NPDES roles and responsibilities prior to transfer.	Much of the urban area is outside of County jurisdiction as it has been annexed to Portland, Troutdale or Gresham. As this area is transferred, the County will continue to coordinate to ensure continuous land use planning services including NPDES roles and responsibilities.	Land Use Planning	<ul style="list-style-type: none"> No activity to report in permit area 	<ul style="list-style-type: none"> Track plans reviewed within the permit area where appropriate. 	New Draft: This BMP was removed because the transfer itself is not a water quality BMP, but rather a part of the annexation process.

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ND2. <u>Issue grading permits and hillside development permits</u> per County zoning code.	Control/reduce amount of erosion and sediments discharged to the receiving waters. Negative charged clay particles attract and attaches to pollutants (heavy metals, oil/grease). Increased turbidity/ sedimentation on channel bottoms impairs water quality and fish habitat.	Land Use Planning	<ul style="list-style-type: none"> No activity to report in permit area. 	<ul style="list-style-type: none"> Track permits issued in permit area. Track inspections and follow up of compliance. 	On schedule. No modifications.
ND3. <u>Enforce stream setback requirements and mitigation requirements</u> for designated significant streams and identified waterways through Significant Environmental Concern and Willamette River Greenway permit reviews. Note this standard is for unincorporated areas of the County.	Preserve significant vegetated areas adjacent to identified water bodies to reduce stormwater runoff and the pollutants carried with it.	Land Use Planning Compliance	<ul style="list-style-type: none"> No activity to report in permit area. 	<ul style="list-style-type: none"> Review compliance with conditions of permit. Review annual number of complaints against enforcement actions, including voluntary compliance. 	New Draft: While the County still implements this BMP, it was removed as it was related to riparian health and is not relevant as a BMP with respect to the MS4. One task that was in this BMP that was maintained was the task to enforce land use and transportation code relating to water quality. This task was moved to, and included under the BMP - Stormwater Treatment for New Development.

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<p>ND4. <u>Regulate storm water quality and quantity.</u> Review stormwater regulations, design standards, and criteria, as issued by the City of Portland and other jurisdictions, and consider for use as guidance to regulate both stormwater quality and quantity associated with new and redevelopment activities. Specifically in the Interlachen area, review new development permit applications for appropriate stormwater quality and quantity controls. Implement appropriate stormwater controls (e.g., pollution plates on inlets, storage facilities, filtration inlets) throughout the County area. Apply County flood development standards for all new public and private new and redevelopment.</p>	<p>Implement localized design standards to adequately address stormwater quality and quantity issues throughout the permit area. Promote safe and sustainable development within the regulatory floodplains and floodways as defined by the 100-year flood boundaries.</p>	<p>Land Use Planning Right-of-Way Permits Road Engineering Bridge Engineering</p>	<ul style="list-style-type: none"> No activity to report in permit area. 	<ul style="list-style-type: none"> Record evaluation of new standards. Track the percentage for permit applications reviewed by County engineering staff to indicate if the design standards are met. Conduct plan checks to ensure drainage standards are used. 	<p>New Draft: The task to review the new Portland standards and consider their adoption was removed because the task was completed. The task to continue to review driveway connections to the ROW and permit for cross culverts was also removed. As this activity is still conducted, it was not relevant as a water quality BMP.</p>
<p>Structural Controls (STR). These activities are designed to implement structural modifications (constructed facilities) to existing systems/development to reduce pollutants in discharges from the municipal separate storm sewer system.</p>				<p>New measurable goals are proposed for in the new draft of the SWMP.</p>	
<p>STR1. <u>Address water quality with new capital or roadway improvement projects.</u> Ensure that any capital improvement or road construction project considers long-term water quality protection, where feasible. Review the plans, design, and purpose of such stormwater quality treatment facilities.</p>	<p>Ensure that water quality facilities, built as part of a drainage/flood control capital improvement project or road construction project apply appropriate design standards to reduce the discharge of pollutants from sites to the maximum extent practicable. Apply consistent practices in addressing water quality impacts.</p>	<p>Road Engineering Bridge Engineering</p>	<ul style="list-style-type: none"> Road Engineering designed water quality treatment facility for a road improvement project within the permit area (223rd/Sandy Blvd) in PY13. The design featured a vault with stormwater filter cartridges within the right-of-way to treat stormwater from the roadway and adjacent development. 	<ul style="list-style-type: none"> Track the number of stormwater treatment facilities installed as part of capital or road way improvement projects. Keep records of design/permit reviews. 	<p>On Schedule No modifications</p>
<p>STR2. <u>Retrofit existing facilities for water quality benefit.</u> When major repair is needed, develop and implement retrofit of existing public drainage and flood control facilities (sumps, retention basins, drainage channels, bioswales, trash racks, sediment trap</p>	<p>Continue sump replacement and retrofit of flood control facilities to improve pollutant reduction aspects of existing drainage and flood control facilities.</p>	<p>Road Engineering Bridge Engineering</p>	<ul style="list-style-type: none"> Road Engineering designed water quality treatment facility for a road improvement project within the permit area (223rd/Sandy Blvd) in PY13. The design featured a vault with stormwater filter cartridges within the right-of-way to treat stormwater from the roadway and adjacent development. Construction occurred in PY14. 	<ul style="list-style-type: none"> Record retrofit progress. 	<p>On Schedule. No modifications.</p>

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devices, etc.) where practicable to improve water quality. Install new systems according to current standards.					
STR3. <u>Inventory and map the County storm sewer system.</u> Improve knowledge of the County system to facilitate identification of problem areas and implementation of control programs in strategic locations. Allocate staff resources to ensure continued map updates.	Ensure County storm sewer mapping is accurate. This BMP supports the MS4 by providing valuable information allowing the County to effectively accomplish other elements of the NPDES permit requirements.	Road Engineering Bridge Engineering Road Maintenance	<ul style="list-style-type: none"> Water Quality and Asset Management staff began a review of the stormwater infrastructure GIS maps to clarify UIC and outfall data. Coordination between the Cities of Gresham, Troutdale and Fairview GIS staff. 	<ul style="list-style-type: none"> Keep records of map updates. 	On schedule No modifications.
Natural System (NS). These activities are designed to help preserve and restore the natural environment/functions to reduce pollutants in discharges from the municipal separate storm sewer system.				New measurable goals are proposed for in the new draft of the SWMP.	
NS1. <u>Conduct vegetative management activities.</u> Continue to implement vegetation management procedures as in the Road Maintenance and Operations Manual (RMOM) to assure that water quality impacts are addressed. Include annual Oregon Department of Agriculture and EPA certification for pesticide applicators. Selectively use pesticides wherever applicable. Continue to improve application practices and train personnel to reduce pollutants to the maximum extent practicable.	Implement existing/improved practices to ensure that pollutants discharged from and into County rights-of-way (roads, ditches) are reduced to the maximum extent practicable.	Road Maintenance Bridge Maintenance	<ul style="list-style-type: none"> Multnomah County maintains an aggressive mowing program to minimize herbicide applications. 82 lane miles mowed within Permit area totaling 224,000 sq. yds. (this figure also includes some area outside the permit area) 	<ul style="list-style-type: none"> Review activities annually and determine if activities are conducted in accordance with the Road Maintenance Operations Manual. Review activities annually and determine the success of integrated vegetation management techniques. Keep records of employees who are certified pesticide applicators including continuing education units completed. 	New Draft: Two tasks were added to this BMP: the first task was to selectively target invasive species for control; the second task was to review and update the Integrated Vegetation Management Program (IVM) during the permit term
NS2. <u>Encourage the use of native vegetation.</u> Promote the use of native vegetation on public and private projects. Utilize existing native plant lists for development review. Encourage use of self-sustaining native vegetation as well as Green Street Design practices which reduces the need for pesticides, fertilizers and water.	Reduce pesticide use and encourage use of self-sustaining vegetation as means of improving water quality.	Land Use & Transportation Planning Bridge Engineering & Maintenance Road Engineering & Maintenance	<ul style="list-style-type: none"> No activity to report in permit area 	<ul style="list-style-type: none"> Implementation monitoring and compliance with vegetation plan. Track number of permitted projects. 	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 13	Assessment of Controls	Proposed Modifications to Schedule or Activities
Program Management (PM). These activities are designed to ensure effective program management, coordination and reporting.				New measurable goals are proposed for in the new draft of the SWMP.	
PM1. <u>Stormwater program management.</u> Develop and manage the Stormwater Program to ensure compliance with the NPDES permit. Implement cost-effective, practical BMPs and activities that are designed to reduce stormwater pollution to "the maximum extent practicable," given the County's unique jurisdiction.	Develop and manage the County's stormwater program to ensure compliance with the NPDES permit. Develop and implement cost-effective, practical BMPs and activities that are designed to reduce stormwater pollution to the "maximum extent practicable."	Program Management	<ul style="list-style-type: none"> Utilized e-mail to provide program updates to functional group members. Managed record keeping system for use by the County staff to track work done in the field, meetings attended, etc. 	<ul style="list-style-type: none"> Keep records of water meetings attended. Evaluate sufficiency of BMP program reporting by functional groups. 	On schedule. No modifications.
PM2. <u>Assess and evaluate the stormwater BMP program.</u> on a continuous basis assess and evaluate the BMP program to ensure use available resources, and make recommendations for improvements in program implementation tasks. Designate County staff to compile/summarize records for each BMP. Utilize BMP record-keeping system for evaluation of progress at regular work sessions with Stormwater Implementation Team.	Assess and evaluate program to ensure the best use of available resources and make recommendations for continuous improvement.	Program Management	<ul style="list-style-type: none"> Water Quality staff attended NPDES co-permittee meetings to discuss revision of County NPDES BMPs for permit renewal. Water Quality staff has submitted a revised Stormwater Management Plan with the current permit renewal submittal package to DEQ. 	<ul style="list-style-type: none"> Keep records of work sessions, including training, evaluation process and results. 	On Schedule. No modifications.
PM3. <u>Maintain field records.</u> Continue to keep field records of maintenance activities Review annually and update as needed the Road Maintenance Operations Manual (RMOM), including procedures regarding water quality impacts to receiving streams based on the records of maintenance activities.	Use record keeping to track performance of BMPs over-time and to determine level of water quality protection provided. Adjust Stormwater Program and associated guidance manuals through adaptive management based on results reported in annual reports.	All functional groups	<ul style="list-style-type: none"> Road Maintenance staff enters BMP activity into the Road Information Systems database on a daily basis. BMP reports are entered in the Environmental Management database by all other functional groups. 	<ul style="list-style-type: none"> Staff review of field logs. 	On schedule. No modifications.

IV. STORMWATER MANAGEMENT PROGRAM BUDGET

Multnomah County Stormwater Management program costs for PY 13 within the Gresham Permit area are primarily associated with the Department of Community Services – Land Use and Transportation Division and the Environmental Compliance Division – Water Quality Program.

Road Maintenance expenditures and anticipated budget allocations within the Fairview and Interlachen incorporate items including drainage maintenance, right-of-way, surface management, vegetation management, general administration, emergency road hazard response and training.

Road Engineering expenditures and anticipated budget allocations within Fairview and Interlachen incorporate drainage studies and reviews, environmental compliance review, as-built plan drafting and inventory, GIS database entry, and training.

Land Use and Transportation Planning expenditures and anticipated budget within the Fairview and Interlachen incorporate design review of Capital Improvements for County roads and private development that impacts the transportation system. Land Use Planning also reviews and permits new development within the Interlachen Area.

Funding sources for stormwater program expenditures are derived from the County general fund for the Land Use Planning program. The Transportation Division receives funding from the State Highway Trust Fund: revenue from this source include the State gasoline tax, weight/mile tax on trucks, and vehicle registration fees, which are constitutionally dedicated to road related issues.

The table below outlines program expenditures for PY13 (Fiscal Year 2007-2008) and provides the anticipated budget for PY 14, (Fiscal Year 2008-2009).

Gresham Permit Area Stormwater Program Implementation

Program Area	PY 13 Expenditures	PY 14 Anticipated Budget
Water Quality Program ¹	\$53,254	\$122,900
Road Maintenance	\$131,275	\$220,200
Road Engineering	\$83,455	\$141,700
Land Use & Transportation Planning	\$2,208	\$2,100

¹The increase is attributed to a reformulation in this value due to a position change within the organization, and not a significant reallocation of resources.

V. MONITORING

The City of Gresham performs the environmental monitoring component of the Stormwater Management Plan within the Permit Area. Please refer to the City of Gresham annual report for a summary of data including monitoring data accumulated throughout the reporting year, and identification of water quality improvements or degradation.

VI. OVERVIEW OF LAND USE CHANGES

The Permit under Schedule B(2)(a)(viii) of Permit No. 101315 provides; “An overview, as related to MS4 discharges, of concept planning, land use changes and new development activities that occurred within UGB expansion areas during the previous year, those forecast for the following year, and an evaluation for consistency with the requirements of Schedule D(2)(c)(i)(2).” The County has not had any land use changes that apply to the Gresham permit area during PY13.

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MEMORANDUM

To: File

FR: Sandra Duffy, Assistant County Attorney

DA: September 6, 2007

RE: Demonstration of Continued Legal Authority to Implement the Programs Outlined in the County Stormwater Management Plan

I have been asked by the Environmental Compliance Division to review the county's legal authority to implement the programs outlined in the stormwater management plan. My review included Chapters 11, 15, and 27 as those provisions pertain to stormwater issues.

I have reviewed these code provisions and have determined that Multnomah County has adequate legal authority as required by 40 CFR 122.26(d)(2)(i). Attached is a table that summarizes these requirement and the applicable Multnomah County Code provisions.

Multnomah County

Adequate Legal Authority

Requirement	Code Authority
Control through ordinance, permit contract, order or similar means, the contribution of pollutants to the municipal storm sewer by storm water <i>discharges associated with industrial activity</i> and the quality of storm water discharged from sites of industrial activity.	The County does not have industrial zoning within the permit area. However, MCC 27.764; MCC 27.768 provide general discharge regulations and limitations. MCC 11.15 (erosion control) provides the ability to require discharger to implement source controls. MCC 15.225- MCC 15.235 prohibits dumping and nuisances generally. MCC 37.0945 provides authority to enforce the prohibition of discharge of pollutants into waters of the state that violate water quality standards.
Prohibit through ordinance, order or similar means, <i>illicit discharges</i> to the municipal separate storm sewer.	MCC 27.773 provides for the prevention or termination of an illicit discharge to the storm sewer system. MCC 27.781 requires separation of the sanitary sewer system from the storm sewer system. MCC 15.225- MCC 15.235 prohibits dumping and nuisances generally.
Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of <i>spills, dumping or disposal of materials other than storm water</i> .	MCC 15.235 prohibits dumping and nuisances generally. MCC 27.772 and MCC 15.225 prohibit spills or dumping of any material other than stormwater to the municipal separate storm sewer.
Control through interagency agreements among the co-permittees the contribution of pollutants form one portion of the municipal system to another portion of the municipal system.	A cooperative monitoring and stormwater management program exists between Multnomah County and the City of Gresham formalized in June 2004. Intergovernmental Agreements related to County roads and associated drainage exist between the County and the cities of Fairview and Gresham.
Require compliance with conditions in ordinances, permits, contracts or orders.	MCC 37.0910, 18.450, 27.773 and MCC 15.230 provide for the enforcement of permits, ordinances or orders.
Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer.	MCC 37.0910, 18.450, and MCC 15.230 provide for the investigation and enforcement of permits, ordinances or orders.