APPENDICES I & J: PERMIT YEAR 12 ANNUAL REPORTS

GRESHAM REPORT SUBMITTED TO DEQ November 1, 2007

PORTLAND REPORT SUBMITTED TO DEQ November 1, 2007

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

November 2007

MULTNOMAH COUNTY OREGON

Department of Community Services
Water Quality Program

Portland/County
Annual Report PY12

MULTNOMAH COUNTY'S
MUNICIPAL NPDES STORMWATER PROGRAM
IN THE PORTLAND NPDES PERMIT AREA

PERMIT YEAR 12 ANNUAL REPORT

This Compliance Report for Permit Year 12(PY 12) (Annual Report) was submitted to Oregon Department of Environmental Quality November 1, 2007. It is the Multnomah County section of a larger report submitted as one volume with the other co-permittees to the Portland Municipal NPDES Permit. The report documents the implementation activities conducted up to June 30, 2007, as required by the permit conditions. To view a copy of the PY 12 Annual Compliance Report for the entire Portland permit area (all co-permittees), it can be found in "Central Files", County Documentation for Transportation Division at 1620 S.E. 190th St., Portland OR 97233.

Note: This Annual Report is spiral bound separate from the implementation plan because it is a final document for references purposes.

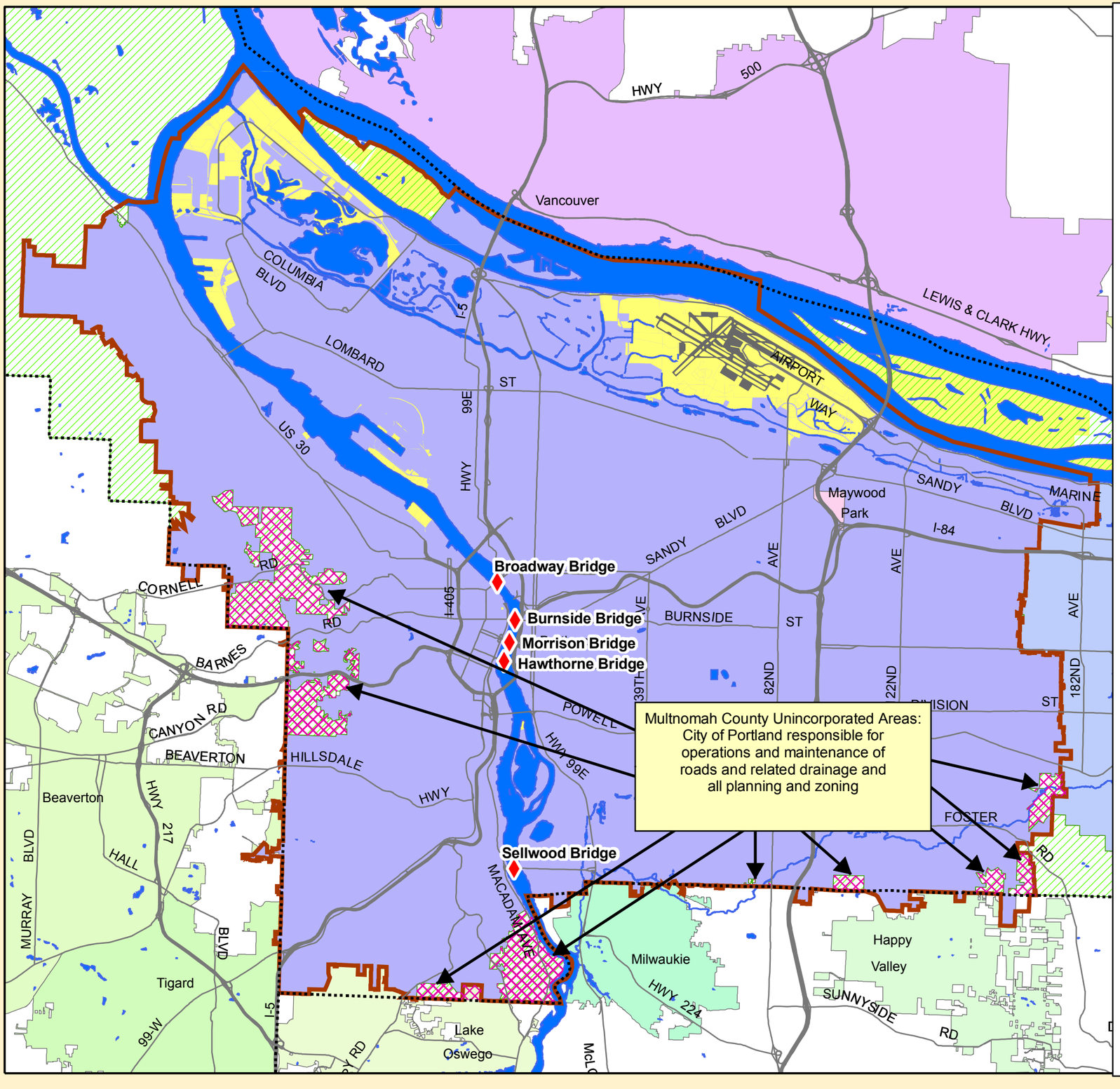

Figure 2-1

NPDES Stormwater Permit Areas

Multnomah County, Oregon

- NPDES Under Multnomah County Jurisdiction
- Unincorporated Multnomah County
- Permit Boundary
- Port of Portland Property
- County Boundaries
- County's Jurisdictional Bridges (Within Permit Boundary)

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February 2006

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Multnomah County
Municipal NPDES Annual Report for Permit Year 12
City of Portland and Co-Permittees
Permit #101314
November 1, 2007

MULTNOMAH COUNTY STORMWATER MANAGEMENT PROGRAM

Summary

Multnomah County implements a comprehensive stormwater management program countywide. 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.

Multnomah County continues to implement an active Stormwater Management Program throughout its jurisdiction, including those areas outside of NPDES permit areas. The BMPs reported here however, apply only to the few remaining activities the County continues to engage in within the Portland permit area.

Description of the County's Permit Area

Within Portland's NPDES permit area, Multnomah County is only responsible for five of the Willamette River bridges and a few small unincorporated pocket areas within the Portland Urban Services boundary.

Coordination with the City of Portland

Multnomah County's activities and associated BMP implementation 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. Of note is the requirement that road and drainage facility maintenance provided by the City is to be provided in a manner consistent with applicable operations and maintenances best management practices as set forth in the City of Portland's Stormwater Management Plan under their MS4 NPDES Permit.

As a result of the Metro Urban Growth Management Functional Plan the City of Portland and Multnomah County entered into an Urban Planning Area Agreement (UPAA) dated March 5, 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 National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit. The level of review shall be provided at the same level provided by the City to other areas within the City limits.

The County's primary stormwater management activity now remaining in the City of Portland's MS4 NPDES permit area is associated with five of the Willamette River bridges. Secondarily, the County retains jurisdiction to review development connection to the right-of-way, in a few unincorporated pockets, on roads that the City maintains and operates.

This Compliance Report for PY 12 (Annual Report) documents the implementation activities of Multnomah County's Stormwater Management Program in the City of Portland NPDES permit area. The PY 12 Annual Report covers activities from July 1, 2006 through June 30, 2007. The Program consists of management tasks submitted by the County and approved by the DEQ. Most of the County's roles and responsibilities for complying with the permit term falls under implementation of the Stormwater Management Plan (SWMP) as Best Management Practices (BMPs) rather than duties toward monitoring, education, or industrial discharges. Please see, NPDES Annual Compliance Report Permit Year 12, submitted by the City of Portland for a full discussion of monitoring completed for this permit.

Program Activities: Best Management Practices (BMPs)

The Multnomah County municipal NPDES stormwater permit program within the Portland permit area utilizes Best Management Practices (BMPs) to meet regulations and implement the program, as described below.

BMPs are source or treatment controls designed to reduce pollution in stormwater. Source controls are practices or devices which keep pollutants out of stormwater runoff in the first place, such as routine inspection and maintenance practices or covers for outdoor storage areas. Treatment controls are typically structural devices designed to temporarily store or treat stormwater runoff to remove pollutants that have already entered the stormwater.

Examples include detention basins and grassed bio-filtration swales. EPA requires that the County's stormwater program include structural and non-structural controls.

The County's stormwater management plan is made up of 35 BMPs grouped into seven categories as shown below:

GENERAL BEST MANAGEMENT CATEGORIES

Second Permit Term BMP Categories Used in Permit Year 12:

(1) Public Involvement and Education (PI);
(2) Operations and Maintenance (OM);
(3) Illicit Discharges Control (ILL);
(4) New Development Standards (ND);
(5) Structural Controls (STR);
(6) Natural Systems (NS); and
(7) Program Monitoring (PM).

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.

As a result of increased public involvement and education efforts since the first permit term, the BMPs were separated by actual practice area into seven different descriptions to better respond to reporting requirements.

Operations and Maintenance (OM)
These BMPs are designed for the implementation of operations and maintenance practices for public streets, bridges, storm sewers, and other facilities to reduce pollutants in discharges into the municipal separate storm sewer system.

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)

To prevent, identify, investigate, and if appropriate, control/eliminate any non-stormwater discharges into the municipal separate storm sewer system.

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.

Note: Much of Multnomah County's jurisdiction in the original permit area has been annexed by the City of Portland or transferred to the Cities of Gresham and Troutdale since the first permit term.

Note: There is no unincorporated area within the permit area containing industrial or commercial facilities.

Note: There are no major parks in the County's portion of the permit area.

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.

Multnomah County has implemented a vegetation management Functional Group within both Road and Bridge Maintenance, partly in response to Stormwater Implementation Team recommendations, since the first permit term began.

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. The following briefly describes these additional activities:

- Overseeing modifications to the stormwater management plan and NPDES permit conditions on behalf of the County
- Compiling and reviewing internal reports
- Writing and submitting the annual report
- Coordinating and communicating with the co-permittees
- Liaison with DEQ

Functional Groups

Managers and staff in the Multnomah County Department of Community Services, Land Use and Transportation Division, implement the Stormwater Management Program. The Team includes Transportation Division Managers, Supervisors, the County Engineer, the Planning Director, and other County staff. To ensure efficient implementation, each team member belongs to a 'functional group' responsible for specific BMPs, as described below.

Functional Group assignments were given to the Implementation Team to ensure active participation by the necessary staff. Assignments were made by matching appropriate staff to the BMPs directly relating to their duties. For example, the staff Engineer responsible for reviewing stormwater facility design is in the DESIGN functional group, while the staff Engineer responsible for overseeing bridge road building contracts is in the CONSTRUCTION functional group. The nine functional groups are:

• Education	• Emergency Response
• Bridge Engineering	• Right-of Way Permits
• Bridge Maintenance	• Road Maintenance
• Land Use and Transportation Planning	• Road Engineering
• Compliance	• Public Affairs

Functional Group Accomplishments: Permit Year 12

Road Maintenance

General NPDES Roles and Responsibilities for Permit Year 12	*Key Accomplishments for Permit Year 12*
The Road Maintenance section of the County Transportation Division will utilize established road maintenance procedures specifically relating to stormwater quality management. Staff will document maintenance procedures through the Stormwater Maintenance Manual and field logs and ensure that problems found in the field relating to stormwater quality and stormwater facilities are addressed.	The County contracts with the City of Portland for operation and maintenance of County owned roadways and associated storm drainage facilities in the unincorporated pockets of land within the Portland urban services area. Computerized inventories of drainage and road appurtenances are maintained by both organizations. The County remains responsible for emergency flooding and landslide road repairs.

Bridge Engineering & Maintenance

General NPDES Roles and Responsibilities for Permit Year 12	*Key Accomplishments for Permit Year 12*
The Bridge section of the County Transportation Division utilizes bridge maintenance procedures to protect water quality and address stormwater management. The group ensures through design of new projects and review of contractors' plans that stormwater and Best Management Practice (BMP) structural controls are considered and properly designed for Capital Improvement Program projects.	• The Burnside Bridge Main Span Rehabilitation Project included four new stormwater catch basins to the bridge. Two filtered catch basins were installed in each of Piers 2 and 3 to catch and filter storm water runoff from the newly rebuilt decks of the bascule leaves. The catch basins replace scuppers that dispersed storm water directly to the river below. The Burnside Bridge and the approaches to the bridge now incorporate 18 water quality treatment devices prior to discharge into the Willamette or City of Portland storm sewer system.

Road Engineering Construction

General NPDES Roles and Responsibilities for Permit Year 12	*Key Accomplishments for Permit Year 12*

County Road Engineering/Construction Group ensures through plan checking, education of contractors, specification interpretation, pre-construction meetings, and rigorous inspection and monitoring, that stormwater controls are properly considered, installed, and maintained as part of all public Capital Improvement Projects. Stormwater controls include structural and non-structural techniques and practices, which will result in reduced pollution.

- The Road Construction functional group does not routinely have any activity within the permit area. The City of Portland by agreement maintains and operates County owned roadways within the permit area.

Road Engineering Design

General NPDES Roles and Responsibilities for Permit Year 12	***Key Accomplishments for Permit Year 12***
County Road Engineering/Design Group ensures through design of new projects and review of contractors' plans that stormwater and Best Management Practice (BMP) structural controls are considered and properly designed for Capital Improvement Program projects. They will promote a balance of stormwater quality and quantity (flood control) to the Maximum Extent Practicable in considering stormwater facility design.	• Engineering Design in conjunction with Right-of-Way continued to review a handful of development requests in the unincorporated pockets that had the potential to impact drainage facilities in the County right-of-way.

Education

General NPDES Roles and Responsibilities for Permit Year 12	***Key Accomplishments for Permit Year 12***
Multnomah County's responsibility for stormwater quality education is two-fold. Public education roles are important but are primarily the City of Portland's NPDES responsibilities for incorporated areas. This change occurred due to the accelerated annexation of SE Portland in 1995. Moreover, the County lost additional	The County's participation in public involvement and education activities is limited due to the limited type of activity the County is involved in within the Portland NPDES permit area. The County is represented through its co-permittee status by the City of Portland's efforts with the "Regional Coalition for

jurisdictional responsibility with completion of the Multnomah County-Portland Compliance Project. Personnel training within the County Transportation and Land Use Divisions is still important, and is more extensive. Training includes initiating activities to educate and inform County staff about the sources and solutions to stormwater program issues.

Clean Rivers and Streams." The residents in the permit area are informed of impacts to the storm drainage system through the Coalition's educational efforts via mass media (radio, movie ads, news paper) and direct mailing. County staff attend and participate in stormwater workshops and meetings sponsored by the City and other local agencies.

- Distributed water quality related brochures to public at County offices.

Emergency Response

General NPDES Roles and Responsibilities for Permit Year 12:

County Emergency response personnel will ensure water quality concerns are addressed during emergency procedures. In particular, staff consider how to prevent materials from reaching the Municipal Separate Storm Sewer System (MS4). Staff will continue to raise awareness of emergency response personnel (in road maintenance group) to ensure general water quality concerns are addressed. Participate in regional Committees addressing these concerns to assure necessary coordination between agencies.

Key Accomplishments for Permit Year 12

- Sampled and tested road waste materials to ensure proper disposal and avoid surface and ground water pollution.

- Reviewed training procedures for County road maintenance staff and administrative staff in quick response to emergency calls regarding spills in right-of-way including proper use of absorbent pads and booms and recorded individual response activities.

Land Use Planning and Transportation Planning

General NPDES Roles and Responsibilities for Permit Year 12:

County Planning staff will ensure stormwater quality management and maintenance practices are considered in land use zoning and permit requirements and applications. In

Key Accomplishments for Permit Year 12

- The County completed transfer of zoning and land use planning authority in the Portland Permit Area, January 1, 2002. (PY 7)

particular, they will enforce land use zoning and permit requirements that may impact stormwater quality. Staff will determine whether land use planning procedures are in place to encourage sound environmental principles relating to water quality Significant Environmental Concern zones.

The County relinquished zoning and land use planning jurisdictional responsibility with completion of the Multnomah County-Portland Compliance Project pursuant to the Metro Urban Framework Functional Plan.

- Transportation Planning staff continued participation with the Sellwood Bridge Concept Planning effort.

Right-Of-Way Permits

General NPDES Roles and Responsibilities for Permit Year 12:

County Right-of-Way Permits Section will ensure stormwater pollution controls are considered and incorporated into permits for private and public construction projects that attach to and are in the County right-of-way. Staff will specify erosion control requirements through contractor bonding for public right-of-way projects. Staff will ensure that maintenance is conducted for life of project and immediate future.

Key Accomplishments for Permit Year 11

- Required utility companies and private contractors operating in the public right-of-way to implement pollutant and erosion control measures such as weep-drains, culvert/ditch inlets, silt socks, biobags, or hay bales.

- Continued to provide information and clarification of truck hauling practices to avoid stormwater pollution.

- A cash deposit was required for any temporary construction access connection to a County right-of-way to ensure that water quality was protected and that concerns were addressed.

- Ensured plan specifications for contractors included measures to address erosion and sediment control during construction activities.

- Right-of-way inspector continued to monitor activities within the right-of-way and to report concerns to the appropriate maintenance or enforcement section.

Compliance

General NPDES Roles and Responsibilities for Permit Year 12:

The Compliance Group is responsible for overall Program Development and Management, Program Assessment and Evaluation, and Program Compliance Reporting.

Key Accomplishments for Permit Year 12

- As part of the County's Toxic Reduction Strategy it initiated a requirement that all County Dental Clinics install mercury amalgam separators a pretreatment to the local sanitary system.
- Conducted program management, including program coordination with County Staff.
- Coordinated reporting activities with City of Portland, as lead permittee.
- Evaluated BMP effectiveness and conducted program assessment throughout the year, resulting in Annual Report to DEQ.

Best Management Practices (BMPs) and Other Activities (OAs): Accomplishments

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. In general, all BMP tasks are on schedule without modification. Modifications occurring due to the Multnomah County –Portland Compliance Project and/or road transfers are noted and explained. 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 12.
- √ Assessment of Controls.
- √ Any proposed modifications or changes to the schedule or activities.

Best Management Practices (BMPs) Matrix for Permit Year 12

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	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.					
PI1. Participate in Regional Public Education Efforts. 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 Office	• The Regional Coalition for Clean Rivers & Streams focused this year's efforts to evaluate past public information/education marketing campaigns and develop new creative campaigns and test them on focus groups.	• Notes of meetings and annual report. • Participation in the coalition and evaluation of campaigns.	On schedule. No modifications.
PI2. Participate in Public Meetings. 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.	Compliance	• County staff attended Johnson Creek watershed council meetings. • The County sits on the Johnson Creek Interjurisdictional Committee and 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.	• 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 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
PI3. Promote public education and involvement in stormwater pollution prevention efforts through distribution of brochures and educational materials at County offices and public water quality meetings and maintenance of County Environmental Compliance Program website.	Provide information to educate and inform the public about stormwater pollution problems and to encourage public involvement in stormwater pollution prevention programs.	Compliance Land Use and Transportation Planning Sustainability	• Salmon Festival 2006 where County staff presented water quality and fish passage challenges associated with the Transportation infrastructure and efforts to address. We unveiled a working watershed model which was well received and provoked many questions and discussions. The festival drew over 7,000 people. • Provided various water quality BMP fact sheets in County offices.	• Estimate number of brochures and educational materials. • Consider most effective venues for distribution of materials.	On schedule. No modifications.
PI4. Training and education for County personnel 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.	Through training of County staff, minimize/eliminate the impact of on-the-job activities to the MS4 and stormwater quality.	All Functional Groups	County Personnel participated in extensive educational activities throughout the permit year. Some of those events include: • Land use and Transportation staff attended an ODOT sponsored Erosion Control Inspectors Training. Program included design, implementation, inspection, maintenance, and enforcement of erosion and sediment controls for construction activities in the right-of-way. • Chemical Applicator Training including ESA and water quality awareness and liability. Two licensed applicators earned continued education units as required by the Oregon Department of Agriculture o New staff orientation on stormwater management program and BMP reporting. o Knotweed Working group semi annual meeting discussed potential treatments for Japanese Knotweed and other invasive species in the right-of-way and within riparian areas. o Operations Level Spill Response Training – provided training for employees who respond to chemical spills. Involves the protection of people, environment and property o Land Use Planners attended Flood Map Modernization Training.	• Track attendance at water quality conferences, trainings, etc. • Track educational material disseminated to staff. • Keep records of trainings provided.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
PI4. (*BMP PI4 report continued*) Training and education for County personnel 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.	Through training of County staff, minimize/eliminate the impact of on-the-job activities to the MS4 and stormwater quality.	All Functional Groups	o Toxics Reduction Strategy for government operations. Formed public advisory workgroup and hosted 9 meetings from May 2005 – January 2006. Staff cooperated with this workgroup to develop a work plan for toxics reduction in government operations beyond compliance. Long-term goal developed. By using the Precautionary Principle as a framework, replace toxic substances, materials, or products of concern with viable least toxic alternatives by 2020. This "Toxics Reduction Strategy" was formally adopted by the Multnomah County Board - of Commissioners on May 11th, 2006 in Resolution 06-073.	• Track attendance at water quality conferences/trainings, etc. • Track educational material disseminated to staff. • Keep records of trainings provided.	
PI5. Implement the Multnomah County Adopt-A-Road program 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	• BMP not implemented in the Portland permit area. However, many Adopt-A-Road events held in other areas of the County during the permit year to pick up trash, reduce access of solids to the stormwater system, and educate the public on the connection between clean stormwater and litter. • County roads operated and maintained by IGA with Portland.	• N/A	On schedule. No modification
PI6. Implement Signage Programs 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	• BMP not implemented in the Portland permit area. County roads operated and maintained by IGA with Portland	• N/A	On Schedule. No Modification.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
PI7. Maintain Public Involvement during the CIP Process. 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	• A key component of the CIP was the identification of capital improvements in the urban unincorporated areas that include all modes of transportation and associated facilities, including stormwater treatment. The County participates in public meetings for the Regional Transportation Plan to discuss the County's projects including those that incorporate stormwater components.	• Record involvement in public meetings through regular CIP process.	On schedule. No modifications.
PI8. Facilitate Public Reporting of Illicit Discharges including illegal dumping 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	• Emergency Response Coordinator responded to reports from local governments, Road Maintenance and Right-of-Way Inspector of illegal dumping within the right-of-way and at County facilities. Staff properly disposed of materials through RMCAT Environmental Services, Inc. • No reports of illegal dumping on Willamette River Bridges.	• Keep records of how problems are being corrected.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
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.					
OM1. Inspect and maintain the Storm Drainage System including inlets, catch basins, water quality facilities and stormwater conveyance system on a regular basis	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.	Road Maintenance	• Catch basin storm filters inspected, maintained and replaced on Broadway and Burnside Bridges. The used filter cartridges are returned to the manufacturer for recycling. • Approximately 6 yards of road waste material was removed from Burnside Bridge and Broadway storm filtered catch basins. • Routine gutter cleaning and debris removal on Morrison Bridge • Routine cleaning of pits on Morrison and Burnside bridges. • Routine bridge maintenance includes clearing debris and flushing drains every three months to ensure drains are not plugged and possible overflow.	• 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.	On schedule. No modifications.
OM2. Conduct street sweeping to include scheduled sweeping, equipment review, and training on a regular basis. Revise and update schedule, equipment, and training as necessary.	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.	Road Maintenance	• BMP not implemented in the Portland permit area. County roads operated and maintained by agreement with City of Portland.	• Not Applicable	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
OM3. Properly dispose of road waste material. 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.	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.	Road Maintenance Emergency Response	• County roads operated and maintained by agreement with Portland. Portland responsible for proper disposal of road waste materials on County roads. • Road waste materials removed from bridge catch basins were recorded and properly disposed of.	• Review records and study results, implement recommendations as practicable.	On schedule. No modifications.
OM4. Evaluate anti-icing operations. 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.	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.	Road Maintenance	• BMP not implemented in the Portland permit area. County roads operated and maintained by IGA with Portland.	• Not applicable.	On schedule. No modifications.
OM5. Regulate truck hauling practices to minimize pollutant discharges. 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.	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.	Road Maintenance	• Bridge and Road Crews are regularly briefed on proper hauling procedures.	• 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.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
OM6. Perform culvert maintenance 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.	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.	Road Maintenance	• BMP not implemented in the Portland permit area. County roads operated and maintained by agreement with Portland.	• Not applicable.	On schedule. No modifications.
OM7. Conduct right-of-way and road shoulders maintenance in ways that avoid and prevent future adverse water quality impacts Continue review of current maintenance practices.	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.	Road Maintenance	• BMP not implemented in the Portland permit area. County roads operated and maintained by agreement with Portland.	• Not applicable.	On schedule. No modifications.
OM8. Conduct ditch maintenance. 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.	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.	Road Maintenance	• BMP not implemented in the Portland permit area. County roads operated and maintained by IGA with Portland.	• Not applicable.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
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.					
ILL1. Interagency coordination on spill response. 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.	Improve procedures to ensure effective interagency coordination and communication, and rapid response.	Emergency Response	• County coordinates with local jurisdictions on spill response when necessary. • Aside from diesel spills, the County contracts with RMCAT to ensure that spills are responded to and cleaned quickly and safely. • No hazardous spills were reported in the county's area of responsibility in the Permit area.	• Is representative participating? Copy notes of meetings for file.	Need to re-address – waiting on new County Emergency Response Director position to be filled. Person participating in this role is no longer with the County.
ILL2. Implement Spill response in County areas. 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.	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.	Emergency Response	• Field logs are used for recording spill events. • Road and Bridge Maintenance Supervisors and lead staff carry spill response and containment materials onboard their vehicles. • County Facilities equipped with Spill Response Kits. • Annual Operations level Spill Response training was provided to Transportation staff. • Crews responded to a minor vehicle accident on the Morrison Bridge. Absorbent booms and dams were placed to prevent antifreeze and oil from reaching scuppers.	• Review logs on an annual basis. • Review the RMOM as necessary to ensure revisions were made. Note evaluation in BMP file.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
ILL3. Address spills from private truck haulers. 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.	Control discharges from private hauling activities to the extent that they are impacting the County right-of-way.	Road and Bridge Engineering Right-of-Way Permits	• Right-of-way and engineering inspectors monitor and enforce spills and tracking of dirt on the right-of–way. • The County provides information, open discussion and clarification of truck hauling practice issues in pre-construction conferences held for each construction project. Discussion of practices is encouraged throughout any active project. • Contractors are required to self-monitor erosion discharge via the Oregon Department of Transportation (ODOT) Erosion Control Monitoring form turned in to the project manager weekly. • Reviewed and approved erosion control plans are required from the contractor at contract start up. Project-specific concerns are addressed in the contract erosion control plan. • County Engineering and Right-of-Way Inspector monitor implementation of Erosion Control Plan to ensure proper maintenance of BMPs.	• 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.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
ILL4. Erosion control for County contractors. 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.	Assure that the design standards in place adequately address water quality issues throughout the permit area.	Road and Bridge Engineering Right-of-Way Permits	• Construction activities within the Permit area this year were limited to bridge surfaces. • Erosion control is a standard bid item on construction projects. • Contractors are required to self-monitor erosion discharge via the Oregon Department of Transportation (ODOT) Erosion Control Monitoring form turned in to the project manager weekly. • Reviewed and approved erosion control plans are required from the contractor at contract start up. Project-specific concerns are addressed in the contract erosion control plan. • County Inspectors monitor implementation of Erosion Control Plans to ensure proper maintenance. • Right-of-Way continues to require a cash deposit to ensure ROW is not negatively impacted.	• Records kept of Erosion and Sediment Control Plan (ESCP) inspection activities. • Review contractor ESCP to ensure compliance.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
ILL5. Pollution control for County and contractors. 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.	Eliminate/reduce discharge of all pollutants from construction sites which adversely impact stormwater and receiving water quality.	Transportation Program Sustainability	• Old waste paint from transportation projects was sorted and stored for proper disposal. If the material is still liquid it is sent for recycling as alternative fuel stock. • Bridge maintenance staff regularly inspects, and replace if necessary, grease tarps on the Morrison Bridge. Grease tarps prevent grease and oil from entering the waterway. New grease tarps replace soiled grease tarps which are then recycled. • Bascule span gutters are routinely cleaned of debris. Sediment control is used during cleaning procedure to keep fine sediment from discharging to river. • Routine inspection and maintenance on the bridges includes hydraulic systems and gate gear boxes. • Three cubic yards of debris was removed from the Morrison Bridge pits. • Since 2001, the Multnomah County Sustainability Program has led County efforts to adopt sustainable internal government business operations that support a thriving environment, economy, and community. Major project areas include sustainable purchasing, green building, global warming, toxics reduction, commute options, and food policy. The program also coordinates the recycling program at county government facilities in partnership with the Multnomah County Facilities and Property Management Division. • As part of the County's Toxic Reduction Strategy it initiated a requirement that all County Dental Clinics install mercury amalgam separators a pretreatment to the local sanitary system.	• Review annually, records kept by staff for the inspection and monitoring of construction sites.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
ILL6. Identify and investigate Illicit discharges. 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	• Illicit discharge inspections conducted during routine maintenance practices. • Stairways on all the Willamette River bridges are regularly cleaned to prevent trash and debris from entering the storm sewer system or waterway below.	• Track follow up and inspection activities.	On schedule. No modifications.
ILL7. Identify and investigate sanitary discharges to the storm sewer. 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	• Bridge Maintenance regularly inspects and maintains sanitary facilities on all Willamette River Bridge structures for proper operation. • County roads operated and maintained by IGA with Portland. Portland inspects for illicit connections during road maintenance activities.	• 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.					
ND1. Coordinate transfer of land use planning authority 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	• No activity within the Portland Permit area during this permit year.	• Track plans reviewed within the permit area where appropriate.	On schedule. No modifications.
ND2. Issue grading permits and hillside development permits 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	• Not Applicable in Permit Area	• 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 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
ND3. Enforce stream setback requirements 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.	Preserve significant vegetated areas adjacent to identified water bodies to reduce stormwater runoff and the pollutants carried with it..	Land Use Planning Compliance	• Not Applicable in Permit Area.	• Review compliance with conditions of permit. • Review annual number of complaints against enforcement actions, including voluntary compliance.	On schedule. No modifications.
ND4. Regulate storm water quality and quantity. 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.	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.	Land Use Planning Right-of-Way Permits Road Engineering Bridge Engineering	• Transportation Right-of-Way Permits and Road Engineering continues to review driveway connection and associated drainage to the right-of-way. Where on site detention is not possible only that pre-development volume is permitted to discharge to the right-of-way. • Bridge Engineering retro fits, when possible, stormwater drainage facilities with water quality treatment during bridge rehabilitation projects. This year two additional treatment facilities were installed on the Burnside Bridge.	• 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.	On schedule. No modifications.
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.					
STR1. Address water quality with new capital or roadway improvement projects. 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.	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.	Road Engineering Bridge Engineering	• Bridge Engineering initiated a significant Capital Improvement Project on the 80 year old Burnside Bridge this year. The project will replace the deck on the lift span as well as parts of the structure responsible for raising the deck for river traffic.	• Track the number of stormwater treatment facilities installed as part of capital or road way improvement projects. • Keep records of design/permit reviews.	On Schedule No modifications

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
	Apply consistent practices in addressing water quality impacts.				
STR2. Retrofit existing facilities for water quality benefit. 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	• Bridge Engineering installed additional water quality treatment catch basins on the Burnside Bridge.	• Record retrofit progress.	On Schedule. No modifications.
STR3. Inventory and map the County storm sewer system. 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	• No activity within the Permit area during this permit year.	• 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 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
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.					
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	• Bridge section continues to maintain vegetation appurtenant to bridge abutments when necessary.	• 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.	On schedule. No modifications.
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	• Limited applicability in Permit area only in bridge right-of-way. The County no longer has planning or zoning authority within the permit area. • No activity of this BMP in the permit area.	• 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 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
Program Management (PM) These activities are designed to ensure effective program management, coordination and reporting.					
PM1. Stormwater program management. 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."	Compliance	• Utilized e-mail to provide program updates to functional group members. Messages incorporated regulatory updates of Clean Water Act; TMDL and NPDES programs, and Underground Injection Control as well as a reminder to report on their assigned BMPs. by using the County's electronic tracking system. • Attended co-permittee meetings to discuss implementation of County NPDES programs.	• Keep records of water meetings attended. • Evaluate sufficiency of BMP program reporting by functional groups.	On schedule. No modifications.
PM2. Assess and evaluate the stormwater BMP program. 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.	Compliance	• Managed record keeping system for use by the County staff to track work done in the field, meetings attended, etc. • Compliant with Oregon Department of Agriculture pesticide/herbicide application protocols.	• Keep records of work sessions, including training, evaluation process and results.	On Schedule. No modifications.
PM3. Maintain field records. 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.	Bridge Maintenance Road Maintenance	o Completed activity logs are compiled and entered into the Road Information Systems database. Additionally, more narrative is provided on Report of Event forms and entered in the Environmental Management database	• Staff review of field logs.	On schedule. No modifications.

Stormwater Management Program Budget

Program activity within the Portland Permit area for Permit year twelve 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 12 (Fiscal Year 2006-2007).and provides the anticipated budget for PY 13 (Fiscal Year 2007-2008).

Portland Permit Area Budget

Program Area	PY 12 Expenditures	PY 13 Anticipated Budget
Environmental Compliance	$61,130	$53,254
Bridge Maintenance/Operations	$2,182,257	$2,679,075
Bridge Engineering	$18,959,649	$24,264,382
Road Maintenance IGA	$172,657	$158,000
Road Engineering	$45,584	$52,955
Transportation Planning	$2,992	$2,244

Monitoring Summary

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.

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.

Multnomah County Attorney's Office
501 S.E. Hawthorne Blvd., Suite 500
Portland, Oregon 97214

PHONE: 503.988.3138
FAX 503.988.3377

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

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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 *discharges associated with industrial activity* 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, *illicit discharges* 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 *spills, dumping or disposal of materials other than storm water*.	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 exits 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.

Gresham/County
Annual Report PY12

MULTNOMAH COUNTY'S
MUNICIPAL NPDES STORMWATER PROGRAM
IN THE GRESHAM NPDES PERMIT AREA

PERMIT YEAR 12 ANNUAL REPORT

This Compliance Report for Permit Year 12 (PY 12) (Annual Report) was submitted to Oregon Department of Environmental Quality November 1, 2007. It is the Multnomah County section of a larger report submitted as one volume with the other co-permittees to the Gresham Municipal NPDES Permit. The report documents the implementation activities conducted up to June 30, 2007, as required by the permit conditions. To view a copy of the PY 12 Annual Compliance Report for the entire Gresham permit area (all co-permittees), it can be found in "Central Files", County Documentation for Transportation Division at 1620 S.E. 190th St., Portland OR 97233.

Note: This Annual Report is spiral bound separate from the implementation plan because it is a final document for references purposes.

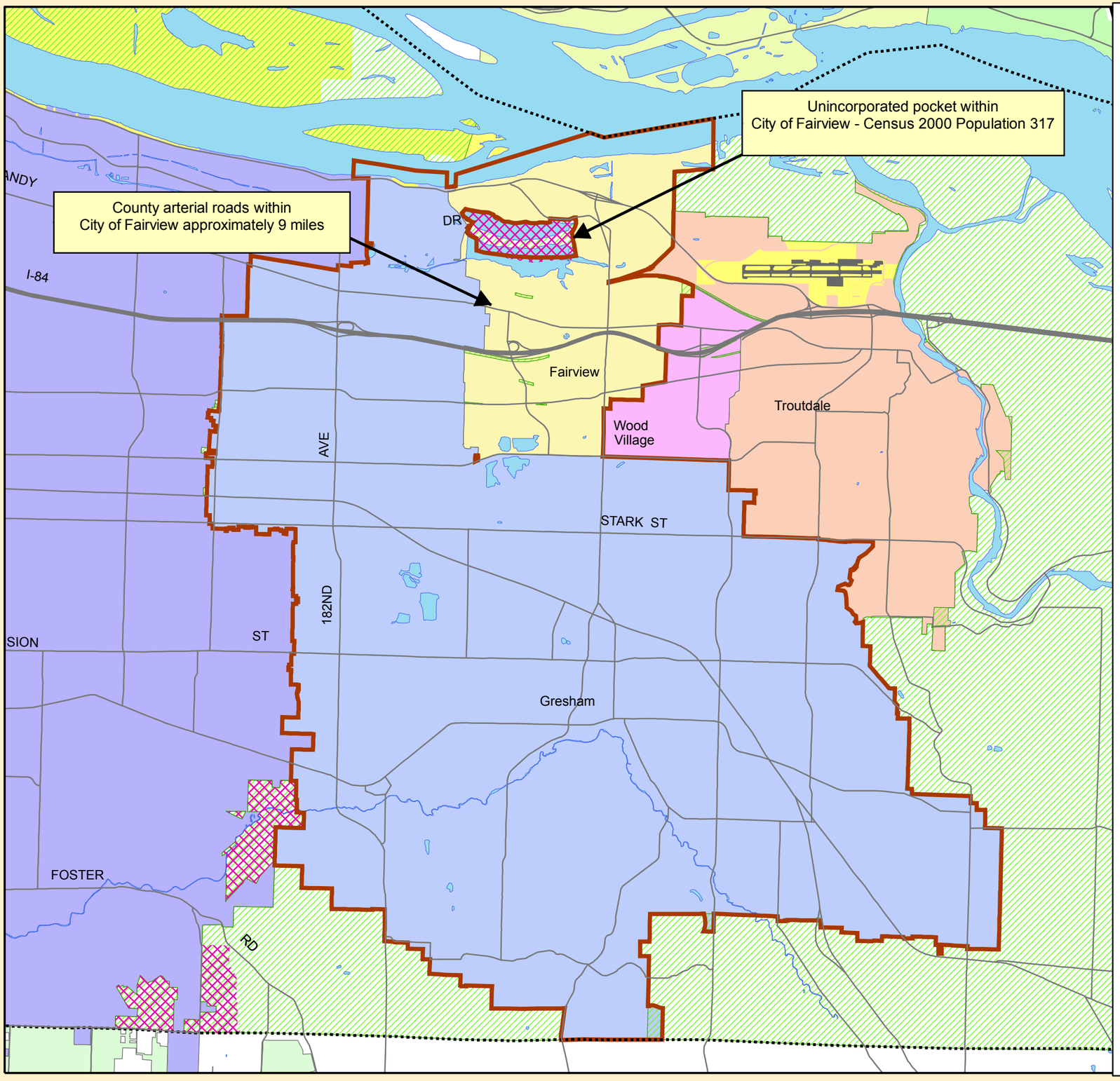

Figure 2-2

NPDES Stormwater Permit Areas

Multnomah County, Oregon

NPDES Under Multnomah County Jurisdiction
Unincorporated Multnomah County
Permit Boundary
Port of Portland Property
County Boundaries

N

0 1 2 Miles

February 2006

20030203-01

Multnomah County
Municipal National Pollutant Discharge Elimination System Annual Report for Permit Year 12
City of Gresham and Co-Permittees
Permit #101315
November 1, 2007

MULTNOMAH COUNTY STORMWATER MANAGEMENT PROGRAM

Multnomah County implements a comprehensive stormwater management program county-wide with the goal of reducing non-stormwater discharges into the municipal separate storm sewer system (MS4) to the maximum extent practicable. This program is maintained and prioritized in response to federal Clean Water Act and Safe Drinking Water Act requirements and the County's responsibility to protect the health and welfare of its citizens and natural environment.

Co-Permittee Role of Multnomah County

Multnomah County is a Co-Permittee to the Gresham/Fairview Municipal National Pollutant Discharge Elimination System (NPDES) Permit (#101315). Each of the participating agencies owns and/or operates a portion of the MS4 within the Gresham/Fairview Urban Services Boundary. Multnomah County is a co-permittee to the Gresham/Fairview Municipal NPDES Permit No. 101315 due to a small percentage of unincorporated land within the Gresham/Fairview permit area - the Interlachen area nestled between Blue Lake and Fairview Lake and the fact that it owns or operates minor portions of the MS4, consisting of County operated and maintained roads and the associated curbing and stormwater catchments that may access City of Fairview storm sewer system. 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 have been transferred to the City (July 1995 and January 1, 2006) leaving approximately 12 centerline miles within the permit area. 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. The remaining land use planning jurisdiction within the Permit area is Interlachen. This compliance report incorporates those changes and diminished area of responsibility.

This Compliance Report for PY 12 (Annual Report) documents the implementation activities of Multnomah County's Stormwater Management Program in the Gresham/Fairview NPDES permit area. The PY 12 Annual Report covers activities from July 1, 2006 through June 30, 2007. The Program consists of management tasks submitted by the County and approved by the DEQ. Most of the County's roles and responsibilities for complying with the permit term falls under implementation of the Stormwater Management Plan (SWMP) as Best Management Practices (BMPs) rather than duties toward monitoring, education, or industrial discharges. Please see, NPDES Annual Compliance Report Permit Year 12, submitted by the City of Gresham for a full discussion of monitoring completed for this permit.

Program Activities: Best Management Practices (BMPs)

The Multnomah County municipal NPDES stormwater permit program within the Gresham/Fairview permit area utilizes Best Management Practices (BMPs) to meet regulations and implement the program, as described below.

BMPs are source or treatment controls designed to reduce pollution in stormwater. *Source* controls are practices or devices which keep pollutants out of stormwater runoff in the first place, such as routine inspection and maintenance practices or covers for outdoor storage areas. *Treatment* controls are typically structural devices designed to temporarily store or treat stormwater runoff to remove pollutants that have already entered the stormwater. Examples include detention basins and grassed bio-filtration swales. EPA requires that the County's stormwater program include structural and non-structural controls.

The County's stormwater management plan is made up of 35 BMPs grouped into seven categories as shown below:

BMP Categories Applied in Permit Year 12:

(1) Public Involvement and Education (PI),
(2) Operations and Maintenance (OM),
(3) Illicit Discharges Control (ILL),
(4) New Development Standards (ND),
(5) Structural Controls (STR),
(6) Natural Systems (NS), and
(7) Program Management (PM).

The following provides an overview description of the County BMP activities in each category.

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.

As a result of increased public involvement and education efforts since the first permit term, the BMPs were separated by actual practice area into seven different descriptions to better respond to reporting requirements.

Operations and Maintenance (OM)

These BMPs are designed for the implementation of operations and maintenance practices for public streets, bridges, storm sewers, and other facilities to reduce pollutants in discharges into the municipal separate storm sewer system.

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)

To prevent, identify, investigate, and if appropriate, control/eliminate any non-stormwater discharges into the municipal separate storm sewer system.

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.

The County continues to require detention systems with proper connection to the right of way, and reviews new development permit applications for sedimentation manholes, catch basins, and other facilities which reduce pollutants to the maximum extent practicable.

All County roadway improvement projects disturbing land greater than 1 acre in the Gresham NDPES permit area are covered by the NPDES Construction General Permit 1200CA. For private developments within the unincorporated Interlachen area, (figure 1-1) the County coordinates with the controls for construction and new development implemented by the City of Fairview. Additionally, County planning and inspection staff is

encouraged to attend workshops and seminars related to stormwater pollution and erosion control offered locally.

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.

Note: Much of Multnomah County's jurisdiction in the original permit area has been annexed by the City of Portland or transferred to the Cities of Gresham and Troutdale since the first permit term.

Note: There is no unincorporated area within the permit area containing industrial or commercial facilities.

Note: There are no major parks in the County's portion of the permit area.

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.

Multnomah County has implemented a vegetation management Functional Group within both Road and Bridge Maintenance, partly in response to Stormwater Implementation Team recommendations, since the first permit term began.

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. The following briefly describes these additional activities:

- Overseeing modifications to the stormwater management plan and NPDES permit conditions on behalf of the County
- Compiling and reviewing internal reports
- Writing and submitting the annual report
- Coordinating and communicating with the co-permittees
- Liaison with DEQ

Functional Groups

The Stormwater Program is largely implemented by the Department of Community Services, Land Use and Transportation. To ensure efficient implementation, each team member belongs to a 'functional group' responsible for specific BMPs, as described below.

Functional Group assignments were given to the Implementation Team to ensure active participation by the necessary staff. Assignments are made by matching appropriate staff to the BMPs directly relating to their duties. For example, the staff Engineer responsible for reviewing stormwater facility design is in the DESIGN functional group, while the staff Engineer responsible for overseeing road building contracts is in the CONSTRUCTION functional group. The eleven functional groups are:

- Road Maintenance
- Construction
- Design
- Emergency Response
- Compliance
- Right-of-Way Permits
- Public Affairs
- Land Use Planning
- Bridges
- Transportation Planning

Functional Group Accomplishments: Permit Year 12

Road Maintenance

General NPDES Roles and Responsibilities for Permit Year 12:

The Road Maintenance section of the County Land Use and Transportation Program utilized established road maintenance procedures specifically relating to stormwater quality management. Staff documented maintenance procedures through the Stormwater Maintenance Manual and field logs and addressed problems found in the field relating to stormwater quality and stormwater facilities quickly.

Key Accomplishments for Permit Year 12

- Senate Bill 1096 transferred the remaining County Roads and associated drainage facilities to the City of Gresham January 1, 2006. The County continues to own and operate approximately 12 centerline miles of roadway within the permit area.
- Approximately 50 cubic yards of road waste material was removed from catch basins by Vactor™ machine.
- Approximately 215 cubic yards of road waste materials were swept and collected from County roads which in effect intercepted their discharge into the stormwater system.
- Approximately 2 cubic yards of debris removed during storm line/culvert inspection and cleaning.
- Coordinated Adopt-A-Road program for civic and volunteer groups in litter pick-ups. All activities reports were maintained in the Adopt-A-Road database.

Construction

General NPDES Roles and Responsibilities for Permit Year12:

County Engineering/ Construction Group ensured through plan checking, education of contractors, specification interpretation, pre-construction meetings,

Key Accomplishments for Permit Year 12

- Senate Bill 1096 transferred the remaining County Roads and associated drainage facilities to the City of Gresham January 1, 2006. The County continues to own and operate approximately 12 centerline miles of roadway within the permit area. There were no Capital improvement projects in the permit area during PY12.

rigorous inspection and monitoring, that stormwater controls were properly considered, installed, and maintained as part of all public Capital Improvement Projects. Stormwater controls include structural and non-structural techniques and practices.

Design

General NPDES Roles and Responsibilities for Permit Year 12:

County Engineering/ Design Group ensured through design of new projects and review of contractor's plans that stormwater and Best Management Practice (BMP) structural controls were considered and properly designed for Capital Improvement Program. They will promote a balance of stormwater quality and quantity (flood control) to the Maximum Extent Practicable in considering stormwater facility design.

Key Accomplishments for Permit Year 12

- Senate Bill 1096 transferred the remaining County Roads and associated drainage facilities to the City of Gresham January 1, 2006. The County continues to own and operate approximately 12 centerline miles of roadway within the permit area. There were no Capital improvement projects in the permit area during PY12.

Education

General NPDES Roles and Responsibilities for Permit Year 12:

Multnomah County's

Key Accomplishments for Permit Year 12

- Clean Water Act and Safe Drinking Water Act regulatory updates provided to the NPDES

responsibility for stormwater quality education is two-fold. Public education both within and outside the Permit area is coordinated through regional partnerships as well as transportation related projects. Personnel training within the County Land Use and Transportation Program is more extensive. Training includes initiating activities to educate and inform County staff about the sources and solutions to stormwater program issues.

Implementation Team.

- Land use and Transportation program participates annually at Metro's Annual Salmon Festival. This year featured a working watershed model that simulated rain fall and snow melt as it flowed through the watershed collecting potential pollutants from various land uses. Water is eventually collected in the catch basins and discharged to surface water.

- Transportation staff receive regular training pertaining to best management practices for drainage and road treatment activities.

Emergency Response

General NPDES Roles and Responsibilities for Permit Year 12	***Key Accomplishments for Permit Year 12***
County Emergency response personnel will ensure water quality concerns are addressed during emergency procedures. In particular, the County will consider how to prevent materials from reaching the Municipal Separate Storm Sewer System (MS4). Staff will continue to raise awareness of emergency response personnel (in	• Sampled and tested road waste materials to ensure proper disposal and avoid surface and ground water pollution. Fifty–two tons of material was disposed of. • Reviewed training procedures for County road maintenance staff and administrative staff in quick response to emergency calls regarding spills in right-of-way including proper use of absorbent pads and booms and recorded individual response activities. • County staff responded to several minor non-hazardous spills within the permit area.

road maintenance group) to ensure general water quality concerns are addressed.

Land Use and Transportation Planning

General NPDES Roles and Responsibilities for Permit Year 12:

County Planning staff will ensure stormwater quality management and maintenance practices are considered in the transportation, land use and building permitting process. Staff will enforce land use requirements designed to minimize impacts to stormwater quality. Staff will determine during permit or design review if standards will be met to encourage sound environmental principles relating to water quality (Sensitive Environmental Concern zones).
Note: These practices apply in unincorporated Multnomah County. They have very limited applicability in Gresham NPDES permit area.

Key Accomplishments for Permit Year 12

- The unincorporated area known as Pleasant Valley was annexed into the City of Gresham during PY11. The transfer of rural land to urban zoning includes the transfer of stormwater management to the City

- Land Use Planning Staff performed land use and development review within the permit area which is limited to the Interlachen area. Consequently, the majority of land use review occurs for the rural areas. Such water quality related review includes land disturbing activities triggering grading and erosion control review, hillside development, and/or sensitive environmental concern areas.

- Increased enforcement activity by utilizing Right-of-Way and Road Maintenance staff to provide preliminary investigation on potential code violations including erosion control and buffer zones around riparian areas. (primarily outside permit area)

Right-Of-Way Permits

General NPDES Roles and Responsibilities for Permit Year 12:	***Key Accomplishments for Permit Year 12***
County Right-Of-Way Permits Section ensured stormwater pollution controls were considered and incorporated into permits issued for utility projects and other construction activities in the County right-of-way. Contractor bond and insurance were required for public right-of-way projects.	• Senate Bill 1096 transferred the remaining County Roads and associated drainage facilities to the City of Gresham January 1, 2006. The County continues to own and operate approximately 12 centerline miles of roadway within the permit area. Consequently there is little right-of-way review authority remaining with the County within the Permit area. • Required utility companies and private contractors operating in right-of-way to implement pollutant and erosion control measures such as weep-drains, culvert/ditch inlets, paved valley gutters, silt socks, bio-bags, or hay bales. • In the unincorporated areas of the County a cash deposit is required for any temporary construction access connection to a County right-of-way to ensure that water quality is protected and concerns are addressed. • Required silt sock or other approved geo-tech liner in catchbasins to collect debris and sediment runoff during land-disturbing activities. • Ensured specifications for contractors included measures to address erosion/sediment control during construction operations. • Right-of-way inspector continues to monitor activities within the right-of-way and report concerns to the appropriate maintenance or enforcement section.

Compliance

General NPDES Roles and Responsibilities for Permit Year 12:	***Key Accomplishments for Permit Year 12***
The Compliance Manager is responsible for overall Program Development	• Conducted program management, including program implementation coordination with County staff. • Coordinated reporting activities with City of

and Management, Program Assessment and Evaluation, and Program Compliance Reporting.	Gresham, as lead permittee. • Evaluated BMP effectiveness and conducted program assessment throughout the year, resulting in Annual Report to DEQ.

Best Management Practices (BMPs) and Other Activities (OAs): Accomplishments

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. In general, all BMP tasks are on schedule without modification. Modifications occurring due to land use planning authority transfer and/or road transfers are noted and explained.

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 12, 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 12

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	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.					
PI1. Participate in Regional Public Education Efforts. 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 Office	• The Regional Coalition for Clean Rivers & Streams focused this year's efforts to evaluate past public information/education marketing campaigns and develop new creative campaigns and test them on focus groups.	• Notes of meetings and annual report. • Participation in the coalition and evaluation of campaigns.	On schedule. No modifications.
PI2. Participate in Public Meetings. 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.	Compliance	• County staff attended Johnson Creek watershed council meetings. • The County also sits on the Johnson Creek Interjurisdictional Committee and 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.	• 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 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
PI3. Promote public education and involvement in stormwater pollution prevention efforts through distribution of brochures and educational materials at County offices and public water quality meetings and maintenance of County Environmental Compliance Program website.	Provide information to educate and inform the public about stormwater pollution problems and to encourage public involvement in stormwater pollution prevention programs.	Compliance Land Use and Transportation Planning Sustainability	• Salmon Festival 2006 where County staff presented water quality and fish passage challenges associated with the Transportation infrastructure and efforts to address. We unveiled a working watershed model which was well received and provoked many questions and discussions. The festival drew over 7,000 people. • Provided various water quality BMP fact sheets in County offices.	• Estimate number of brochures and educational materials. • Consider most effective venues for distribution of materials.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
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.	Through training of County staff, minimize/eliminate the impact of on-the-job activities to the MS4 and stormwater quality.	All Functional Groups	County Personnel participated in extensive educational activities throughout the permit year. Some of those events include: • Land use and Transportation staff attended an ODOT sponsored Erosion Control Inspectors Training. Program included design, implementation, inspection, maintenance, and enforcement of erosion and sediment controls for construction activities in the right-of-way. • Chemical Applicator Training including ESA and water quality awareness and liability. Two licensed applicators earned continued education units as required by the Oregon Department of Agriculture • New staff orientation on stormwater management program and BMP reporting. • Knotweed Working group semi annual meeting discussed potential treatments for Japanese Knotweed and other invasive species in the right-of-way and within riparian areas. • Operations Level Spill Response Training – provided training for employees who respond to chemical spills. Involves the protection of people, environment and property • Land Use Planners attended Flood Map Modernization Training.	• Track attendance at water quality conferences, trainings, etc. • Track educational material disseminated to staff. • Keep records of trainings provided.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
PI4. (*BMP PI4 report continued*) Training and education for County personnel 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.	Through training of County staff, minimize/eliminate the impact of on-the-job activities to the MS4 and stormwater quality.	All Functional Groups	• Toxics Reduction Strategy for government operations. Formed public advisory workgroup and hosted 9 meetings from May 2005 – January 2006. Staff cooperated with this workgroup to develop a work plan for toxics reduction in government operations beyond compliance. Long-term goal developed. By using the Precautionary Principle as a framework, replace toxic substances, materials, or products of concern with viable least toxic alternatives by 2020. This "Toxics Reduction Strategy" was formally adopted by the Multnomah County Board - of Commissioners on May 11th, 2006 in Resolution 06-073.	• Track attendance at water quality conferences/trainings, etc. • Track educational material disseminated to staff. • Keep records of trainings provided.	
PI5. Implement the Multnomah County Adopt-A-Road program 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	• Routine litter pickup completed by volunteer adopt–a-road groups. County disposed of collected trash.	• Review and evaluate field logs for correct implementation of BMPs.	On schedule. Need to re-map road segments where adopt-a-road groups are assigned..
PI6. Implement Signage Programs 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	• Signage will be re-evaluated due to the transfer of the majority of County roads within the permit area to the City of Gresham.	• 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.	Need to re-evaluate signage sites.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
PI7. Maintain Public Involvement during the CIP Process. 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	• No capital improvement projects were constructed within the Interlachen area Fairview permit area nor was the CIP updated during this permit year.	• Record involvement in public meetings through regular CIP process.	On schedule. No modifications.
PI8. Facilitate Public Reporting of Illicit Discharges including illegal dumping 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	• Emergency Response Coordinator responded to reports from local governments, Road Maintenance and Right-of-Way Inspector of illegal dumping within the right-of-way and at County facilities. Staff properly disposed of materials through RMCAT Environmental Services, Inc.	• Keep records of how problems are being corrected.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
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.					
OM1. Inspect and maintain the Storm Drainage System including inlets, catch basins, water quality facilities and stormwater conveyance system on a regular basis	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.	Road Maintenance	• 513 catch basins cleaned mechanically using a Vactor™ machine. (Includes some inlets outside of the permit area.) • 50 cubic yards of material collected and prevented from entering the stormwater system from catch basins (Includes some material collected outside the permit area.) • 2 cubic yards of debris collected from storm lines and culverts. (Includes some material collected outside the permit area.) Cleaning included inspection of system. • 393 cubic yards of debris was collected from 9 miles of ditches. (Includes some material collected outside the permit area.) • Stormwater conveyance system inspected as part of routine maintenance practice. • Re-sized road inventories, databases, and map of jurisdictional boundaries due to Gresham road transfer.	• 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.	On schedule. No modifications.
OM2. Conduct street sweeping to include scheduled sweeping, equipment review, and training on a regular basis. Revise and update schedule, equipment, and training as necessary.	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.	Road Maintenance	• 312 County lane miles swept within the permit area (includes some lane miles outside of Permit area) for road materials. • 215 cubic yards of road waste materials collected and prevented from access to County and co-permittee stormwater systems. • Sanding materials reduced by concentrating on grades, curves and intersections.	• 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.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
OM3. Properly dispose of road waste material. 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.	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.	Road Maintenance Emergency Response	• Road waste material was temporarily stored, decanted, sampled and analyzed prior to disposal by incineration. • 434 tons of road waste material from street sweeping, catch basins, sumps, culverts, storm lines and ditches was properly disposed of through the county's contractor. Material amount includes collection throughout the County road system. • Participated in regional road waste committee to develop recycling opportunities.	• Review records and study results, implement recommendations as practicable.	On schedule. No modifications.
OM4. Evaluate anti-icing operations. 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.	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.	Road Maintenance	• Road Maintenance continued using Calcium Magnesium Acetate (CMA) as an alternative for salt for de-icing. • Thirty four lane miles applied with CMA using 884 gallons of solution. (Including areas outside of Permit area).	• 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	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
OM5. Regulate truck hauling practices to minimize pollutant discharges. 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.	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.	Road Maintenance	• Discussed issues relating to tailgates, leakage, and hauling of materials in dump trucks (including 1 ton pickup dumps) and trailers. Discussed required maintenance. • Inspect and double check all tailgates for leaks on 1 ton, 10 yard, and 5 yard dumps, brooms, induction truck (Vactor™), etc. There is more than one tailgate per truck on some of the county's 10 and 5 yard trucks. Crews use daily equipment inspection forms to report equipment problems. • No spills or leaks from county trucks reported during the permit year. • County continues to use environmentally friendly release agents when hauling asphalt.	• 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.	On schedule. No modifications.
OM6. Perform culvert maintenance 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.	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.	Road Maintenance	• Staff attends informational updates by participating in meetings of the Oregon Association of County Engineers and Surveyors (OACES). Issues covered include road maintenance and culvert design and related regulatory updates. • Crews collected 2 Cu. Yds. of debris from culverts and storm lines. (Includes some material collected outside the permit area.)	• 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.	On schedule. No modifications.
OM7. Conduct right-of-way and road shoulders maintenance in ways that avoid and prevent future adverse water quality impacts. Continue review of current maintenance practices.	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.	Road Maintenance	• Road shoulders maintained according to County Road Maintenance Operations Manual and the Oregon Department of Transportation Water Quality ands Habitat Guide Best Management Practices (Revised 2004) criteria to minimize runoff of silt and other materials. • Outside of permit area, crews responded to emergency situations adversely impacting the County ditch and applied appropriate measures to prevent sediment from impacting local receiving streams. • Roadside mowing (Includes some mowing conducted outside permit area within urban areas) on 74 roadside miles.	• 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.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
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.	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.	Road Maintenance	• Vacuum truck utilized for debris removal to avoid scalping the ditch surface of vegetation resulting in minimal ground disturbance. • Emergency maintenance procedures utilized bio bags, coir matting, and rock check dams to control sediment flows resulting from agricultural practices impacting the County's ditch. • Re-seeding of the ditch with appropriate grass blends when necessary.	• Review field logs on an annual basis. Ensure each district is participating at sufficient frequency levels to reduce pollutants to the maximum extent practicable.	On schedule. No modifications.
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.					
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.	Improve procedures to ensure effective interagency coordination and communication, and rapid response.	Emergency Response	• County coordinates with local jurisdictions on spill response when necessary. • Aside from diesel spills, the County contracts with RMCAT to ensure that spills are responded to and cleaned quickly and safely. • Continued to address non-hazardous spills and report hazardous spills to appropriate agencies.	• Is representative participating? Copy notes of meetings for file.	New County Emergency Management Director this Permit Year. Is beginning to review and implement regional coordination to emergency preparedness and response.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
ILL2. Implement Spill response in County areas. 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.	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.	Emergency Response	• Emergency Response crews responded to several minor spills within the permit area. The crews are trained in first response procedures and clean up of non-hazardous materials. For hazardous spills the County contracts with RMCAT to ensure that spills are responded to and cleaned quickly and safely. • Field logs are used for recording spill events. • Road Maintenance Supervisors and lead staff carry spill response and containment materials onboard their vehicles. • County Facilities equipped with Spill Response Kits.	• Review logs on an annual basis. • Review the RMOM as necessary to ensure revisions were made. Note evaluation in BMP file.	On schedule. No modifications.
ILL3. Address spills from private truck haulers. 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.	Control discharges from private hauling activities to the extent that they are impacting the County right-of-way.	Road and Bridge Engineering Right-of-Way Permits	• Right-of-Way Inspector continues to enforce on impacts to the ROW including tracking of mud from agricultural, industrial or construction activities. • No events reported on county roads within permit area (Fairview or Interlachen).	• 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.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
ILL4. Erosion control for County contractors. 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.	Assure that the design standards in place adequately address water quality issues throughout the permit area.	Road and Bridge Engineering Right-of-Way Permits	• Although there were no significant County CIP construction projects within the Permit area this year, where the County does conduct activities it continues to implement this BMP. • Erosion control is a standard bid item on construction projects. • The County provides information, open discussion and clarification of truck hauling practice issues in pre-construction conferences held for each construction project. Discussion of practices is encouraged throughout any active project. • Contractors are required to self-monitor erosion discharge via the Oregon Department of Transportation (ODOT) Erosion Control Monitoring form turned in to the project manager weekly. • Reviewed and approved erosion control plans are required from the contractor at contract start up. Project-specific concerns are addressed in the contract erosion control plan. • County Inspectors monitor implementation of Erosion Control Plan to ensure proper maintenance. • Right-of-Way continues to require a cash deposit to ensure ROW is not negatively impacted.	• Records kept of Erosion and Sediment Control Plan (ESCP) inspection activities. • Review contractor ESCP to ensure compliance.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
ILL5. Pollution control for County and contractors. 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.	Eliminate/reduce discharge of all pollutants from construction sites which adversely impact stormwater and receiving water quality.	Transportation Program Sustainability	• Old waste paint from transportation projects was sorted and stored for proper disposal. If the material is still liquid it is sent for recycling as alternative fuel stock. • Contractors are monitored for spills from equipment during construction activities. Outside permit area contractor was required to install oil absorbent boom across water course to retain any potential oil or chemical discharge during construction. • Since 2001, the Multnomah County Sustainability Program has led County efforts to adopt sustainable internal government business operations that support a thriving environment, economy, and community. Major project areas include sustainable purchasing, green building, global warming, toxics reduction, commute options, and food policy. The program also coordinates the recycling program at county government facilities, in partnership with the Multnomah County Facilities and Property Management Division.	• Review annually, records kept by staff for the inspection and monitoring of construction sites.	On schedule. No modifications.
ILL6. Identify and investigate Illicit discharges. 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	• Illicit discharge connection inspections conducted during routine maintenance practices. • No reported illegal dumping within County's permit area this permit year.	• Track follow up and inspection activities.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
ILL7. Identify and investigate sanitary discharges to the storm sewer. 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	• Illicit connection inspections conducted during routine storm sewer system maintenance. None found during PY 12. • No sanitary discharges to the storm sewer system reported within the Permit area.	• 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.					
ND1. Coordinate transfer of land use planning authority 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	• A portion of the unincorporated area known as Pleasant Valley was annexed into the City of Gresham during PY11. The transfer of rural land to urban zoning includes the transfer of stormwater management to the City.	• Track plans reviewed within the permit area where appropriate.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
ND2. Issue grading permits and hillside development permits 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	• Land use zoning and permit authority within the Gresham permit area is limited to the Interlachen area between Fairview and Blue Lakes in Gresham (fig.1-1). The Interlachen area is almost a mile long and consists of homes along NE Interlachen Lane. • Hillside Development permits (HDP) are required when development is proposed on slopes > 25%. Neither HDP nor Grading and Erosion Control permits were issued during PY12. The area is completely built out and only occasional re-development occurs. • The erosion control inspection program expanded by utilizing Right-of-Way Inspection staff to review minimal impact projects under the newly revised grading and erosion control program. • During PY 12 one minimal impact grading and erosion control permit was issued including a follow-up inspection.	• Track permits issued in permit area. • Track inspections and follow up of compliance.	On schedule. No modifications.
ND3. Enforce stream setback requirements 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.	Preserve significant vegetated areas adjacent to identified water bodies to reduce stormwater runoff and the pollutants carried with it.	Land Use Planning Compliance	• Land use zoning and permit authority within the Gresham permit area is limited to the Interlachen area between Fairview and Blue Lakes in Gresham. (fig.1-1) The Interlachen area is almost a mile long and consists of homes along NE Interlachen Lane. • During PY 12 there were no Significant Environmental Concern permit reviews conducted within the permit area. • During PY 12 one enforcement action was necessary. Subsequently, a minimal impact grading and erosion control permit was issued including a follow-up inspection.	• Review compliance with conditions of permit. • Review annual number of complaints against enforcement actions, including voluntary compliance.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
ND4. Regulate storm water quality and quantity. 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.	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.	Land Use Planning Right-of-Way Permits Road Engineering Bridge Engineering	• Transportation Right-of-Way Permits and Road Engineering continues to review storm water discharge where on site detention is not possible and only that pre-development volume is permitted to connect to the ROW. • Transportation Right-of-Way Permits and Road Engineering continues to review driveway connection and associated drainage to the right-of-way. • Land Use Planning requires onsite detention of stormwater for new development. • No activity of this BMP occurred within the Permit area during PY 12.	• 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.	On schedule. No modifications.
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.					
STR1. Address water quality with new capital or roadway improvement projects. 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.	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.	Road Engineering Bridge Engineering	• There were no capital or road improvement projects in the permit area during PY 12. • Road Engineering designing water quality treatment facilities for a capital improvement project within the permit area in PY13.	• Track the number of stormwater treatment facilities installed as part of capital or road way improvement projects. • Keep records of design/permit reviews.	On Schedule No modifications
STR2. Retrofit existing facilities for water quality benefit. 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	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	• Road Engineering designing water quality treatment facilities for a capital improvement project within the permit area in PY13.	• Record retrofit progress.	On Schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
devices, etc.) where practicable to improve water quality. Install new systems according to current standards.					
STR3. Inventory and map the County storm sewer system. 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	• No BMP activity necessary within the permit area this Permit year.	• 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.					
NS1. Conduct vegetative management activities. 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	• Multnomah County maintains an aggressive mowing program to minimize herbicide applications. • 74 roadside miles mowed within Permit area totaling 216,369 sq. yds. (this figure also includes some area outside the permit area) • Chemical Applicator re-certification and continuing education for staff. (see PI-4) • Re-seeding activities in roadside ditches using drought native grass blends.	• 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.	On schedule. No modifications.

Best Management Practice	Overall Intent, Goals and Objectives	Functional Group(s) for BMP Implementation	Key Accomplishments for Permit Year 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
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	• Landscaping plans in County right-of-way are reviewed and bonds are required for 2-year establishment period. • County Planning distributed guidance regarding erosion control including use of native vegetation. • County coordination with local jurisdictions on landscaping plan in right-of-way to encourage sustainable landscaping practices. • County Planning provides review of development projects in environmental concern areas. Effort is made to incorporate native plant species into restoration activities and landscape design. Typically outside the Permit area. • Transportation Vegetation Management staff participates with the Cooperative Weed Management Area Steering Committee.	• 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 12	Assessment of Controls	Proposed Modifications to Schedule or Activities
Program Management (PM) These activities are designed to ensure effective program management, coordination and reporting.					
PM1. Stormwater program management. 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."	Compliance	• Utilized e-mail to provide program updates to functional group members. Messages incorporated regulatory updates of Clean Water Act; TMDL and NPDES programs, and Underground Injection Control as well as a reminder to report on their assigned BMPs. by using the County's electronic tracking system. • Facilitated work sessions with County staff related to program implementation and reporting. • Attended co-permittee meetings to discuss implementation of County NPDES programs.	• Keep records of water meetings attended. • Evaluate sufficiency of BMP program reporting by functional groups.	On schedule. No modifications.
PM2. Assess and evaluate the stormwater BMP program. 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.	Compliance	• Managed record keeping system for use by the County staff to track work done in the field, meetings attended, etc. • Worked with County staff to compile individual BMP files for evaluation of progress. • Compliant with Oregon Department of Agriculture pesticide/herbicide application protocols.	• Keep records of work sessions, including training, evaluation process and results.	On Schedule. No modifications.
PM3. Maintain field records. 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.	Bridge Maintenance Road Maintenance	• Completed activity logs are compiled and entered into the Road Information Systems database. Additionally, more narrative is provided on Report of Event forms and entered in the Environmental Management database • Re-size databases to reflect remaining county jurisdiction after Gresham road transfer.	• Staff review of field logs.	On schedule. No modifications.

MULTNOMAH COUNTY
Stormwater Management Program Budget

Multnomah County Stormwater Management program costs for PY 12 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 PY12 (Fiscal Year 2006-2007) and provides the anticipated budget for PY 13, (Fiscal Year 2007-2008).

Gresham Permit Area Stormwater Program Implementation

Program Area	PY 12 Expenditures	PY 13 Anticipated Budget
Environmental Compliance	$61,130,406	$53,254
Road Maintenance	$131,335*	$135,275*
Road Engineering	$71,840*	$83,455*
Land Use & Transportation Planning	$2,144*	$2,208*

*Note: Due to Senate Bill 1096 (Regular session 2005) County roads and associated functions within the City of Gresham were transferred to the City mid-way through permit year 11. The County's programs reflect program participation within Interlachen and Fairview only.

Environmental Monitoring Summary

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.

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)."

Adjacent to the Gresham Permit area, the Springwater Area Regionally Significant Industrial areas came into the UGB in December of 2002. The City of Gresham continues to direct concept planning for Springwater. Multnomah County continues to have jurisdiction over new development activities in these areas pending annexation or rezoning to urban uses, which represents the land use change element of the reporting requirement. New development activities are limited to those uses allowed in the current development code, and can generally be characterized as low impact rural uses. Runoff from new development is required to be managed on site of the activity so that runoff rates pre and post development is the same for the design storm.

In June of 2006, 541 acres of the unincorporated area known as Pleasant Valley was annexed into the City of Gresham. The City of Gresham and Multnomah County first entered into an Urban Area Planning Agreement in 1979. It provided for a transfer of urban services from Multnomah County to City of Gresham.

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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

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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.

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 *discharges associated with industrial activity* 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, *illicit discharges* 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 *spills, dumping or disposal of materials other than storm water*.	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 exits 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.