



**Multnomah County NPDES MS4 Phase I Permit  
Stormwater Management Program**

**DRAFT**  
**Annual Report 2013**  
**Permit year 18**

**Submitted to:**

*Oregon Department of Environmental Quality  
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*Submitted in Accordance with the Requirements  
of the National Pollutant Discharge Elimination System  
(NPDES) Permit Number 103004, File Number 120542*

**Submitted by:**

*Water Quality Program  
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## **1. Introduction**

Multnomah County implements a comprehensive stormwater management program with the goal of reducing pollutants into the municipal stormwater system to the maximum extent practicable. This program is maintained and prioritized in response to the federal Clean Water Act and the County's responsibility to protect the health and welfare of its citizens and natural environment. The Stormwater Management Plan is the main component of the stormwater management program. This plan is submitted to and approved by the Oregon Department of Environmental Quality (DEQ) under the National Pollutant Discharge and Elimination System Municipal Separate Storm Sewer Phase I (NPDES MS4 Phase I) permit. The County's roles and responsibilities for complying with the permit term falls under seven categories of Best Management Practices (BMPs) with a focus on operating and maintaining the County bridges and roads.

This Annual Report summarizes the implementation activities of Multnomah County's Stormwater Management Plan in the County's permit area for the Permit Year 18 (Fiscal year 2013 - July 1, 2012 – June 30, 2013).

## **2. Program Overview**

### **History**

From 1995 to 2010, the Oregon Department of Environmental Quality (DEQ) regulated stormwater from Multnomah County through two separate NPDES MS4 Phase I Discharge permits: Permit #101314 for the areas within the City of Portland permit boundary and Permit #108013 for the areas within the Gresham permit boundary. Multnomah County was a co-permittee on both Portland and Gresham's MS4 Permit.

The County had a limited amount of regulatory area under each permit under the two separate MS4 permits. To reduce the administrative burdens for program management and reporting, Multnomah County requested to DEQ that the permit areas be combined under a single individual permit for the 2010 permit renewal. DEQ granted this request and issued the new individual Phase I permit on December 30, 2010.

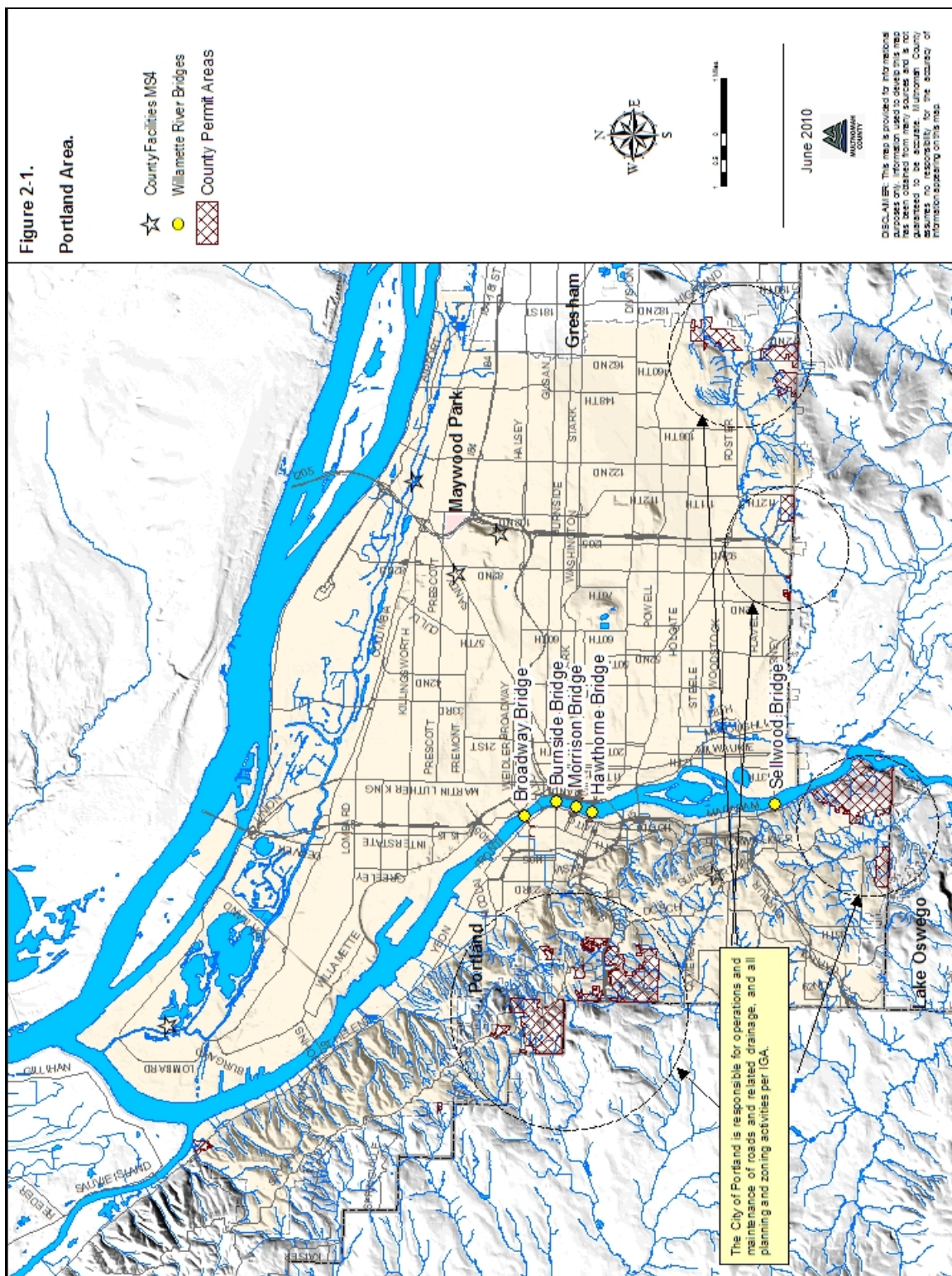
### **Permit area description**

Multnomah County is a unique jurisdiction with NPDES permit areas composed of several discrete urban pockets, and approximately twenty-eight miles of road and bridge right-of-ways. The terms "Portland Area" and "Gresham Area" are used in this report to provide clarity in the area descriptions, and to provide continuity from the previous reporting areas.

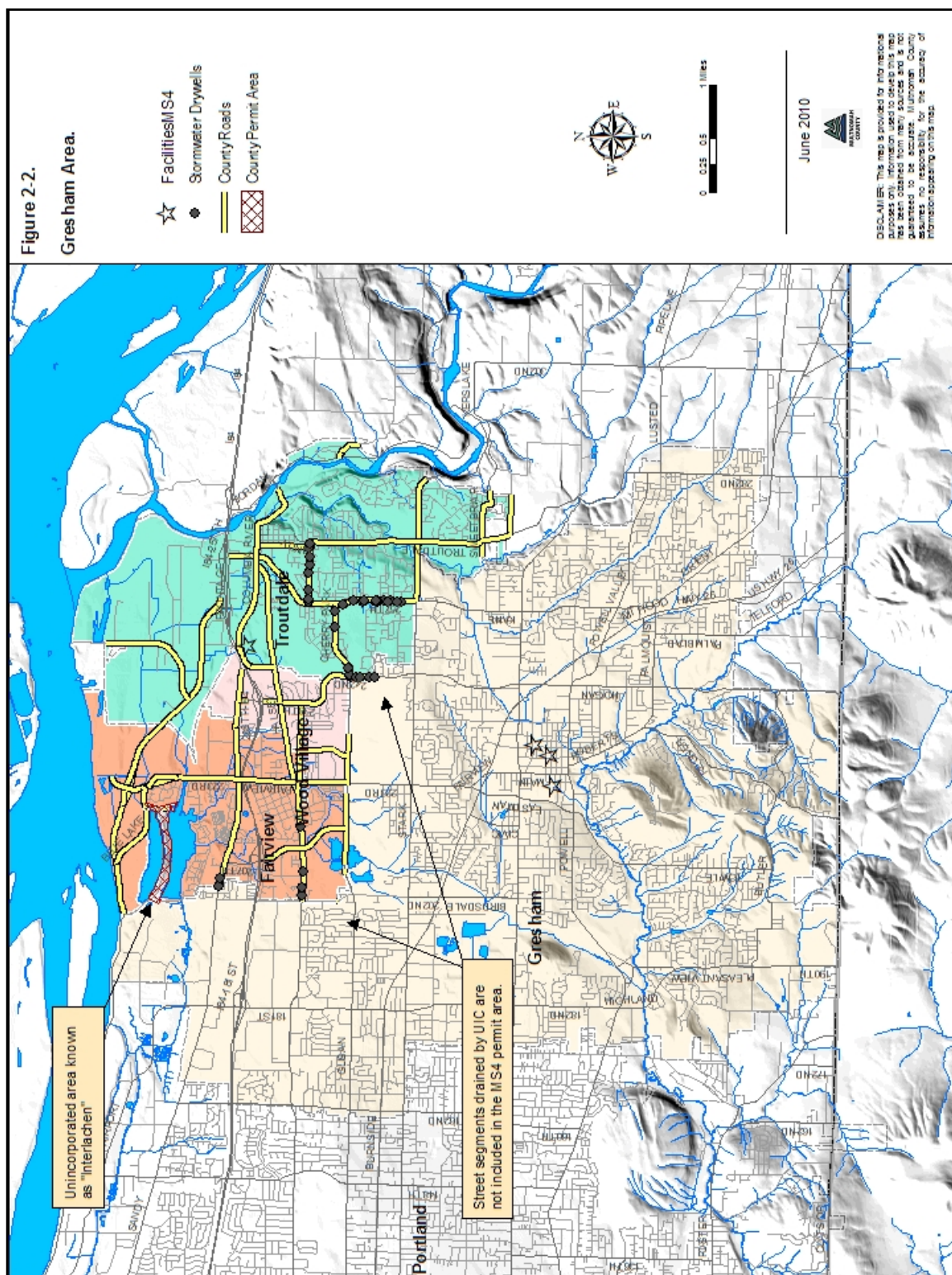
Within the Portland Area, Multnomah County is responsible for five Willamette River bridges (see Figure 2-1). A few small unincorporated pocket areas within the Portland Urban Services boundary are under Portland's stormwater management through an Intergovernmental Agreement with the City of Portland. These areas are also under the City of Portland's land use authority.

Within the Gresham Area, Multnomah County is responsible for approximately twenty-eight miles of arterial roadways in the Cities of Fairview, Troutdale, and Wood Village, and the unincorporated residential area known as "Interlachen" that is located between Fairview Lake and Blue Lake (see Figure 2-2). In 2007, Troutdale and Wood Village came under NPDES Phase II coverage, and the County roads in those communities also came into permit coverage. Some road segments shown in the following maps are served by Underground Injection Controls or lack curb/gutter systems and do not discharge to surface waters.

More specific details regarding the County's jurisdiction are provided in the Stormwater Management Plan (updated April 2011).







## Reporting requirements

The following table summarizes the requirements for the annual report as described in Schedule B.5 of the permit:

<i>Permit reporting requirement</i>	<i>Annual report section</i>
a. Status of each SWMP program element and progress in meeting measurable goals	BMP summary - status
b. Status or results of any public education program effectiveness evaluation conducted during the reporting year and summary of how the results were or will be used for adaptive management	BMP summary PI-1
c. Summary of the adaptive management process implementation during reporting year, including proposed changes or additions to BMPs	BMP summary – adaptive management
d. Proposed changes to SWMP elements designed to reduce TMDL pollutants	BMP summary
e. Summary of total stormwater program expenditures and funding sources over the reporting year and those anticipated in the next reporting year	Stormwater program budget
f. Summary of monitoring program results, including monitoring data and analyses	Environmental monitoring; also see Gresham and Portland permit annual reports
g. Proposed modifications to the monitoring plan	Environmental monitoring
h. Summary of the enforcement actions, inspections, public education programs, and illicit discharge screening and investigations	BMP summary
i. Overview of land use changes, concept planning and new development activities in the reporting year, including number of new post-construction permits issued and an estimate of the total new or replaced impervious surface area related to new development and redevelopment projects	Permit area description; BMP summary (ND, STR)
j. Results of ongoing field screening and follow up related to illicit discharges.	BMP summary (ILL-5)



## Environmental monitoring

The City of Gresham and City of Portland have historically collected, managed, and analyzed stormwater and instream data on behalf of the County as the lead Permittee for the respective NPDES permits when the County was a co-permittee on both permits. Because the County's jurisdiction is part of the fabric of both permit areas, the data for each permit represented the overall quality of stormwater and instream health. This environmental monitoring was a component of the Intergovernmental Agreements (IGA) with both the City of Portland and City of Gresham.

Beginning December 2010, the County managed its stormwater program under a single individual permit. The monitoring requirements are met through a new IGA with the City of Gresham, and the monitoring plan is available online through the City of Gresham website.

The environmental data and analysis presented in the Annual Reports for City of Gresham independent of this report fulfill the monitoring requirement for the County's Annual Report, per the respective IGA. The monitoring results are attached as an appendix to this report.

The data includes monitoring requirements from the County permit: two instream monitoring sites, two macroinvertebrate monitoring sites, and one mercury monitoring site. These are fulfilled by data from Fairview and Beaver Creeks, and the Columbia Slough Water Quality Facility.

## Adaptive management process

The assessment of BMPs occurs annually during preparation of the County NDPES annual report, to be submitted to DEQ by November 1 of each permit year. Among other reporting requirements, the MS4 annual report must contain (Schedule B.5) the following:

*The status of implementing the stormwater management program and each SWMP program element, including progress in meeting the measurable goals identified in the SWMP.*

By providing a summary in the NPDES annual report of progress toward attaining BMP measurable goals (through data collection and tracking measures), the County both: 1) meets the aforementioned reporting requirement, and 2) facilitates a critical step in adaptively managing its stormwater program by assessing each BMP.

While preparing this MS4 annual report, the County collected data and feedback from staff responsible for implementing/reporting on each BMP to facilitate the BMP assessment process. Key factors considered in the annual evaluation include but are not limited to:

- *Was the BMP measurable goal attained? If not, describe circumstances why, and how progress will be made toward future attainment.*
- *For multi-year BMPs, were milestones or timelines met?*
- *Can we feasibly refine or improve the BMP to gain efficiency or effectiveness in removing stormwater pollutants?*
- *Are staffing/financial resources available to support such a BMP improvement or refinement?*

### 3. BMP Summary

The Multnomah County Stormwater Management Plan is a set of Best Management Practices (BMPs) designed to reduce stormwater pollutants to the maximum extent practicable. The County's stormwater management plan is made up of thirty-two BMPs grouped into seven categories as shown below. The following table summarizes the task, measurable goals, status, and changes for each BMP.

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

Managers and staff in several Multnomah County workgroups implement the Stormwater Management Program. The functional groups are:

Public Affairs	Public Affairs Office
Bridge Engineering	Department of Community Services
Bridge Maintenance	Department of Community Services
Land Use and Transportation Planning	Department of Community Services
Code Compliance	Department of Community Services
Facilities	Department of County Assets
Emergency Response	Department of Community Services
Right-of Way Permits	Department of Community Services
Road Maintenance	Department of Community Services
Road Engineering	Department of Community Services
Asset Management	Department of Community Services
Nuisance Code	Health Department, Community Health Services
Program Management	Department of Community Services

## PI – Public Involvement and Education

Overall goal: *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.*

	Tasks	Measurable Goal	Status	Adaptive Management
PI-1 Participate in Regional Public Education Efforts	<p>Provide County representative to attend the <i>Regional Coalition for Clean Rivers and Streams</i> (RCCRS) meetings.</p> <p>Plan and Implement public education campaign promoting behaviors that improve water quality.</p>	<p>Help develop and implement RCCRS annual strategy to promote behavior change through the RCCRS website, television, radio and social media.</p> <p>Evaluate education campaign effectiveness by November 1, 2014.</p>	<p>RCCRS continued to contract with EviroIssues to manage the outreach campaign. The firm continued the use of “Don’t be a Water Hazard” and “Is your lawn chemical free” logos and slogans for web, social media, billboard, bus ads, radio and cable spots based on previous focus group research by Davis, Hibbits &amp; Midgall in 2010. RCCRS also paid to support the KOIN TV “Do the Right Thing – Clean Water Tips” program which promotes on broadcast TV and web. Over 30,226,000 impressions for all media outlets.</p> <p>Additionally, the County’s watershed model was used at the Children’s Clean Water Festival during the permit term.</p>	The RCCRS membership is decreasing as a result of budget cuts and other priorities. Future discussions to stabilize the coalition are needed as well as additional ideas for messaging.
PI-2 Participate in Public Meetings	Attend public meetings related to water quality.	Track participation in watershed council and ad hoc committee meetings.	Water Quality (WQ) staff shared monitoring and project updates at regular monthly meetings of the Johnson Creek Watershed Council and Sandy River Watershed Council. WQ Staff participates in the Interjurisdictional Committee for Johnson Creek, a technical workgroup that coordinates stream monitoring and analysis for Johnson Creek watershed. WQ staff facilitates a similar group, known informally as the Beaver Creek Partnership.	No change
PI-3 Distribute Public Education Information Regarding Stormwater	<p>Make brochures and other educational materials from Soil &amp; Water Conservation Districts and Watershed Councils available at the planning office.</p> <p>Ensure that public education materials are current and cover relevant topics.</p>	Track the number of materials distributed at meetings, front counters and online.	Although the landowners who visit the planning office are largely rural property owners not included in the NPDES permit area, this public education outlet is valuable for the TMDL pollutant reduction. Approximately 45 brochures were taken on various topics from septic maintenance, riparian management and livestock care, during the last permit year.	No change

PI-4 Conduct Training and Education for County Personnel	<p>Send a representative(s) to water quality conferences when feasible. Share information learned in training with other staff.</p> <p>Train volunteers, maintenance and operations crews, as well as inspectors on impacts of activities on water quality and MS4 in addition to new approaches to water quality protection and proper reporting procedures.</p>	Conduct a minimum of one staff training session a year.	<p>Road crew trainings include: Road Maintenance &amp; Operations Manual (RMOM) BMP review (11-12, 2012), IVM training (6/2013), Vactor training (2/2013), Contech Stormfilter training (9/2012), pipe inspection camera training (11/2012).</p> <p>WQ staff attended the regional Urban Ecology symposium (2/2013), ACWA conference (7/2012) and ACWA Stormwater Summit (5/2013). Vegetation staff continued to participate in regular meetings of the Cooperative Weed Management Areas group.</p>	No change
PI-5 Implement the Adopt-a-Road Program	<p>Develop a strategy to promote the adopt-a-road program.</p> <p>Track road segments where volunteer roadside litter removal and clean-up is performed through participation in County Adopt-A-Road programs.</p>	Continue to advertise and support the adopt-a-road program as interest exists.	<p>Adopt-a-road program is promoted through a County webpage, complete with instructions. Eleven groups are active in the NPDES area. Clean ups range from once a month to once a year depending on the group. Adopt a Road is a trash pickup, but additional eyes on the road for illegal dumping is a benefit to the Roads program, as well as increasing the stewardship ethic in the community.</p>	No change
PI-6 Maintain Signage to Protect Water Quality	<p>Determine whether any areas need to be marked or re-marked and provide staff and materials to carry this out.</p> <p>Maintain signs in right-of-way promoting watershed awareness, as requested by watershed councils.</p>	Inspect drain markers and signage once per permit term at all catch basins and stream crossings in the permit area.	GIS mapping of catch basins were completed with drain marker inspection in 2012. Over 80 new catch basin markers – “Do Not Pollute” – were installed at various locations.	No change
PI-7 Provide Opportunities for Public Involvement During the CIP Process	Involve the public in the process of updating the Capital Improvement Plan and Program (every two years) and in evaluating the stormwater quality impacts and issues associated with the program.	<p>Ensure opportunities for public participation in the CIP update process through public meetings.</p> <p>Ensure that public comment period is established for permit renewal.</p>	<p>CIP update process was completed in FY13 with review of stormwater treatment among criteria for road, bicycle and pedestrian priorities to develop rankings. Public outreach for the CIP was conducted through a variety of different venues. This included attendance of public open houses held around the county. Transportation capital program information and the proposed CIP were posted online and were available for public review and comment on the County’s website. Additionally, information was also made available on the city websites of Fairview, Troutdale, and Wood Village. The cities of Fairview, Troutdale, Gresham and Wood Village reviewed the CIP, and it was presented to the East Multnomah County</p>	No change

			Transportation Committee (EMCTC) at their March 2013 public meeting for review and comment. EMCTC endorsed the CIP at their April 2013 meeting. The public involvement program for the Sellwood Bridge project also continues from previous years.	
PI-8 Facilitate Public Reporting of Illicit Discharges	Determine where signs need to be posted regarding illegal dumping and place them.	Install and maintain signage in all known areas that are problematic in terms of dumping.	No activity in permit year.	No change

## OM – Operations and Maintenance

Overall goal: *To implement 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.*

<i>BMP</i>	<i>Tasks</i>	<i>Measurable Goal</i>	<i>Status</i>	<i>Adaptive Management</i>
OM-1 Review the RMOM for Potential Updates to Address Water Quality	Review the Road Maintenance Operations Manual annually.  When manual revisions are made, conduct refresher staff training as provided for under BMP PI-4.	Annually review of the RMOM to ensure current practices are incorporated respect to water quality.	The RMOM was updated in October 2012. Road Maintenance supervisors and staff reviewed the winter activities in December 2012 and January 2013.	No change
OM-2 Inspect and Maintain the Storm Drainage System	Inspect the entire stormwater conveyance system on an annual basis.  Utilize the record keeping system and database to record findings and follow-up work completed by field crews.	Establish criteria used to determine catch basin (CB) cleaning frequency to maintain effective pollutant removal by July 1, 2011.  Clean all roadway catch basins (CB) a minimum of 2 times per year, unless catch basin cleaning records indicates less frequent or more frequent cleaning is appropriate.	Criteria for roadway CB and sweeping frequency were submitted to DEQ on June 22, 2011. The program involves remote data entry from vehicles in the field and GIS to store data.  Data of catch basin fullness were captured for the spring and fall cleaning. Initial data shows that over half of catch basins had between 0-3" of sediment accumulation at the time of cleaning. Further data analysis is forthcoming.  Parking lot CBs maintained by County Facilities were inspected and cleaned on annual basis.	New AVL equipment contracts will be pursued pending work by the City of Portland to research and select an AVL firm. This will further enhance system reliability.
OM-3 Conduct Street Sweeping	Track street sweeping efforts to record the sweeping frequency.	Use catch basin cleaning records or inspections to inform the necessary sweeping frequency.  Establish criteria used to determine street sweeping frequencies to maintain effective pollutant removal, and identify high priority street sweeping areas by July 1, 2011	(See OM-2 and PM-3) Sweeping routes were driven approximately twice a month for County arterial roads. The next step in the program will be to evaluate catch basin fullness during cleaning intervals will allow us to associate sweeping with catch basin cleaning frequency.	See above AVL comment
OM-4 Properly Dispose of Road Waste Material	Identify alternatives for a new decant facility to be used for the dewatering of road wastes, or upgrades to the existing facility.	Annually review disposal options that protect water quality.	Vactor waste and sweepings are disposed at a private transfer facility. Vactor liquid is field decanted into public sewer trunk with approval from Fairview. Ditch sediment profiling continued with a range of traffic	No change



			volumes were analyzed and determined that high traffic rural and urban ditch spoils should be treated as solid waste. Ditching spoils from the urban area will continue to be disposed at a waste facility.	
OM-5 Minimize Impacts from Anti-icing Operations	Continue to follow the County RMOM procedures for the application, collection, and washing of sanding materials applied to roadways.  Continue to research alternative anti-icing methods.	Conduct street sweeping to recover sanding materials within two weeks after the Road Maintenance Manager determines that the roads are free from the threat of an ice or snow event.	Sanding materials were used very sparingly on steep hills and freeway ramps during approximately eight freezing events in FY13 and were removed within two weeks after the threat of ice was gone. The effectiveness of MgCl has allowed us to reduce sanding.	Continue to reduce the use of sanding materials with MgCl to reduce water quality impacts
OM-6 Minimize Impacts from County Truck Hauling Practices	Follow the RMOM procedures for conducting equipment checks when hauling materials.	See OM-1	No activity in permit area.	See OM-1
OM-7 Minimize Impacts From Right-of-Way and Road Shoulder Maintenance	Conduct maintenance according to RMOM	See OM-1	Activity was minimal and followed RMOM BMPs.	See OM-1
OM-8 Minimize Impacts from Ditch Maintenance	Conduct maintenance according to RMOM	See OM-1	Activity was minimal and followed RMOM BMPs.	See OM-1
OM-9 Maintain County-owned stormwater facilities	Inventory facilities by January 1, 2013	Annual inspection of treatment facility	Road Maintenance purchased replacement filters for Contech Stormfilters in FY13, and will be installing the units in FY14. Stormfilters on County bridges were inspected and replaced in FY13.  County Facilities maintains several Vortex units which were cleaned in FY13.	No change

## ILL – Illicit Discharge

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

<i>BMP</i>	<i>Tasks</i>	<i>Measurable Goal</i>	<i>Status</i>	<i>Adaptive Management</i>
ILL-1 Implement the Spill Response Program	Continue to follow and implement the Multnomah County Spill Response Plan.  Track and record spills and information regarding spills as they occur.	Conduct spill response procedures when spills are reported.	County crews responded to one minor spill of fuel on Sweetbriar Rd in Troutdale. Absorbent material was applied to the spill, then cleaned up and disposed at a private facility. Fuel was contained on the road surface. Several other car accidents generated minor spills all of which were contained.	No change
ILL-2 Address Spills from Private Truck Haulers	Report to the appropriate agency of the private truck hauling practices impacting the County right-of-way and the stormwater conveyance system.	Contact all private haulers when spills are observed to ensure proper clean up	No activity in permit area.	No change
ILL-3 Require Erosion and Pollution Controls for Public Projects (formerly ILL-4 and ILL-5)	Execute formal contracting practices including pre-construction meetings, bonding, construction permit review, and erosion control inspections.	Inspect 100% of County project sites	Work on the County's Morrison Bridge was completed in May 2013 following inspection processes.  DEQ visited the Sellwood Bridge construction project with EPA in May 2013 during the NPDES program audit and discussed construction inspection at length with County inspectors.	No change
ILL-4 Investigate Illegal Dumping	Continue to implement the existing field inspection program during routine maintenance activities. Record and report any noticeable illegal discharge and dumping in the right-of-way.	Clean up all reported discharge or debris dumped in the right-of-way	No threats to water quality were reported from illegal dumping activity in the permit area.	No change
ILL-5 Detect and Eliminate Illicit Discharges to the Storm Sewer	Continue to inspect and maintain the bridge restroom facility holding tanks on a quarterly basis.  Document enforcement response plan for illicit discharges by November 1, 2011  Develop pollutant parameter actions levels and identify priority outfall locations by July 1,	Conduct quarterly maintenance of bridge facilities.  Conduct tasks by date above, and annual inspection of dry weather flows at major outfalls.	Bridge facilities maintained quarterly without incident.  Dry weather outfall inspection of eight outfalls occurred in August 2012. No flows were observed.	Several outfalls selected for inspection have limited stormwater systems and are unlikely to have cross connections, Changes to the

	2012.			outfall list will occur for FY13.
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**ND – New Development**

Overall goal: *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.*

<i>BMP Description</i>	<i>Tasks</i>	<i>Measurable Goal</i>	<i>Status</i>	<i>Adaptive Management</i>
ND-1 Require Erosion Control for Private Development	Review and provide comments on applications for grading permits and hillside development permits.  Perform Erosion and Sediment Control Inspections for all approved construction projects.	Inspect 100% of sites once during the permit review, and a second time during active construction.	No activity in the permit area.	No change
ND-2 Regulate Stormwater Discharge	Continue to review new development permit applications to ensure proper connection to the storm sewer system and application of design standards.  Inspect stormwater facilities during and after construction to ensure that the site is compliant with design standards.	Conduct plan reviews and inspections for 100% of permitted projects.	No activity in permit area.	No change

## STR – Structural Controls

Overall goal: *To implement structural modifications (constructed facilities) to existing systems/development to reduce pollutants in discharges from the municipal separate storm sewer system.*

<i>BMP</i>	<i>Tasks</i>	<i>Measurable Goal</i>	<i>Status</i>	<i>Adaptive Management</i>
STR-1 Address Water Quality with New Capital or Roadway Improvement Projects	<p>Develop criteria and strategy for when stormwater treatment will be incorporated into public projects.</p> <p>Conduct plan checks of stormwater quality treatment facilities that are included in capital improvement or roadway improvement projects to assure they follow standard design criteria that include stormwater quality considerations, and that the appropriate facility is selected for the intended purpose.</p>	Identify strategy or criteria used to determine when stormwater quality treatment will be incorporated into Capital Improvement Projects by November 1, 2013.	Water Quality and Road Engineering staff are discussing criteria for when stormwater treatment will be incorporated into public projects.	No change
STR-2 Retrofit Existing Facilities for Water Quality Benefit	<p>Include consideration of stormwater treatment for water quality purposes in capital projects to reduce pollutants to the maximum extent practicable.</p> <p>Conduct a hydromodification assessment and develop a strategy to identify and prioritize potential retrofit projects by November 1, 2014.</p>	<p>Identify one retrofit project by November 1, 2013.</p> <p>Develop hydromodification and retrofit strategy by November 1, 2014.</p>	Morrison Bridge replacement of steel deck with concrete deck in FY12 included new storm filter catch basins and improved traction for reduced accidents/spills. The movable solid deck now also collects debris which is collected in traps when decks are raised. Bio-bags are used at the outlets of these traps to catch sediment.	No change
STR-3 Inventory and Map the County Storm Sewer System	Continue to update the County GIS storm sewer system map.	Complete GIS drainage system maps of the NPDES permit area by 2014, including catch basins, culverts, manholes, ditches and pipes systems.	Stormwater infrastructure mapping in GIS continues with paid internships and a new limited duration staff hire. Infrastructure inventory, location and networking continue in collaboration with neighboring jurisdictions who share the County stormwater pipe system.	GIS mapping is on track with the hire of a limited duration staff in June, 2013. Funding for this position is available for one year to meet completion goals for this BMP.

## NS – Natural Systems

Overall goal: *to help preserve and restore the natural environment/functions to reduce pollutants in discharges from the municipal separate storm sewer system.*

<i>BMP</i>	<i>Tasks</i>	<i>Measurable Goal</i>	<i>Status</i>	<i>Adaptive Management</i>
NS-1 Conduct Vegetation Management Activities	<p>Follow RMOM and IVM procedures.</p> <p>Maintain current Oregon Department of Agriculture (ODA) certifications for chemical applicators.</p> <p>Review and update integrated vegetation management practices (IVM) annually.</p>	Review RMOM vegetation activities and the Integrated Vegetation Management Program (IVM) annually.	<p>Facilities Management developed a Pesticide, Herbicide, and Fertilizer management policy for use on County properties with input from the Water Quality Program.</p> <p>No changes on the existing Road Services IVM were proposed.</p>	No change
NS-2 Specify Native Vegetation in ROW and Permitted Projects	<p>Review the current contract specifications for landscaping in the right-of-way, and update as needed.</p> <p>Promote the use of native vegetation and develop contract specifications for landscaping. Condition plan approvals with invasive plants removal, if needed.</p> <p>Ensure contract specifications are followed which require certain landscaping materials and placement.</p>	Inspect 100% of project sites for landscaping specifications.	No activity in permit year.	No change

## PM – Program Management

Overall goal: *Program Management BMPs ensure effective program management, coordination, and reporting.*

<i>BMP</i>	<i>Tasks</i>	<i>Measurable Goal</i>	<i>Status</i>	<i>Adaptive Management</i>
PM-1 Stormwater Program Management	Continue to participate in the NPDES MS4 coordination meetings and any DEQ meetings. Continue to work with other NPDES MS4 permittees and DEQ to implement the stormwater management program.  Review each BMP file annually. Prepare an annual report to demonstrate the County's compliance with requirements. Submit to DEQ.	Annually review BMP implementation data and submit annual report by November 1 each year.	Annual report submitted to DEQ.	No change
PM-2 Assess and Evaluate the Stormwater BMP Program	Evaluate progress of BMPs for annual report using adaptive management approach.	Develop an adaptive management approach by November 1, 2011.	The adaptive management approach was discussed mainly in the context of our catch basin and sweeping efficiency program. All deadlines were met for FY13.	No change
PM-3 Maintain Environmental Management Database	Pilot new GPS and onboard computer technology by July 2011.  Develop GIS or other mapping technology to sync with GPS system by July 2012.  Develop SAP work orders and tracking to integrate with GIS by July 2013.	Ensure tasks are completed by dates shown.	Work orders for Road Maintenance are captured in SAP work order system. GIS is used to capture catch basin cleaning and sweeping data.	(See OM-2)



## 4. Stormwater Management Program Budget

Program activity within the County's NPDES permit area is divided between areas that were previously managed under the Portland area and Gresham area NPDES permits. The Water Quality program, consisting of one staff manages the County stormwater program, and portions of two Asset Management staff provide mapping and database services across the entire permit area. Services specific to the two areas are described below.

### Gresham area stormwater related services:

- 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 for design review of capital improvements and right-of-way impacts to the County roads in Fairview, Troutdale, and Wood Village, and for design review and permits for development within the Interlachen Area.

### Portland area stormwater related services:

- 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, contracts the City of Portland and Clean Water Services to maintain and operate County owned roads to their respective standards in the urban unincorporated pocket areas through Intergovernmental Agreements.
- 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.
- 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 two sources. The Land Use Planning receives funding from County's General Fund. The Transportation Division (Road and Bridge

Services and Transportation Planning) receive funding from the State Highway Trust Fund, which includes the State gasoline tax, weight/mile tax on trucks, and vehicle registration fees. Highway Trust Funds are constitutionally dedicated to road related issues. The County has no revenue from dedicated stormwater fees. This is a result of the County roads and unincorporated pockets being nested within other city jurisdiction's service areas.

The table below outlines program expenditures for Fiscal Year 2013 and provides the anticipated budget for Fiscal Year 2014.

<i>Program Area</i>	<i>FY 2013 actual</i>	<i>FY 2014 budget</i>
Water Quality Program <sup>1</sup>	\$205,600	\$185,300
Asset Management <sup>2</sup>	\$13,300	\$14,500
Gresham area		
• Road Maintenance <sup>3</sup>	\$179,900	\$180,000
• Road Engineering <sup>3</sup>	\$162,700	\$166,000
• Land Use & Transportation Planning	\$4,400	\$4,400
Portland Area		
• Bridge Maintenance/Operations	\$26,200	\$43,200
• Bridge Engineering <sup>4</sup>	\$68,615,900	\$150,389,000
• Road Maintenance IGA	\$88,500	\$100,000
• Road Engineering <sup>5</sup>	\$10,000	\$11,600
• Transportation Planning	\$0	\$0

<sup>1</sup>Figure includes entire Water Quality program includes one staff, monitoring budget for UIC, TMDL and NPDES programs, and additional program costs. Increase from previous year is the result of some additional allocation of other program areas that previously funded water quality activities.

<sup>2</sup>Estimate is based on a portion of time from two Asset Management staff.

<sup>3</sup>Estimate is based on actual spending from the previous year for time spent on water quality work plus a budget for training.

<sup>4</sup>The amount shown represents the entire Bridge Engineering program. The entire program is included because Bridge Services do not budget or collect charges for water quality tasks. Water quality best practices are integral in all aspects of design and construction and hence we are not able to be segregated from the other work. Increase in budget reflects Sellwood Bridge funding.

<sup>5</sup>Estimate of the amount of time spent on water quality issues in Portland area right-of-way.