



City of Eugene, Oregon
Total Maximum Daily
Load (TMDL)
Seventh Annual Report

*Submitted to Oregon Department of
Environmental Quality*

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TMDL SEVENTH ANNUAL REPORT

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1. INTRODUCTION

This report summarizes the progress of Total Maximum Daily Load (TMDL) associated activities conducted by the City of Eugene (City) from July 1, 2014 through June 30, 2015, as described in the City's TMDL Implementation Plan (TMDL Plan). This document is the City's **TMDL Seventh Annual Report**.

Following this introduction, **Section 2** of the report provides background information on the Willamette Basin TMDL and its implications for the City. **Section 3** provides information about which local area water bodies are addressed by the Willamette Basin TMDL and references the City's pollution reduction strategies which are documented in the TMDL Plan. **Section 4** includes a progress report for activities identified in the TMDL Plan and an update on the other permits and programs relevant to the TMDL. **Section 5** references the City's annual municipal stormwater report for water quality monitoring and long-term trends.

2. BACKGROUND

Eugene lies at the upper end of the Willamette watershed, as shown in Figure 2-1. The Willamette River flows through the City for about 6 miles, from River Mile 184 to River Mile 178, as shown in Figure 2-2¹. The Willamette River is currently listed by the State of Oregon DEQ as a water quality limited river due to elevated water temperatures, elevated mercury concentration in fish tissues, and elevated bacteria levels, all of which at various points on the River may exceed State water quality standards. Other water bodies in the Eugene area that are tributary to the Willamette are water quality limited due to elevated bacteria levels, low dissolved oxygen levels, and elevated turbidity including, variously, Amazon Creek, Amazon Diversion Channel, and Fern Ridge Reservoir. When water quality standards are not met, the federal Clean Water Act requires that a TMDL to be established. A TMDL determines how much pollution can be discharged to a water body without exceeding water quality standards. On September 21, 2006, the DEQ issued the Willamette Basin TMDL as an Order, and submitted the TMDL to the Environmental Protection Agency (EPA) for approval. EPA approved the Willamette Basin TMDL on September 29, 2006.

Along with other cities and agencies in the Willamette Basin, the City of Eugene was named by DEQ as a "designated management agency" (DMA) in that it has legal authority over sectors or sources contributing pollutants on the approximately 28,314 acres within the city limits, in that it

¹ Figure 2-2 illustrates the seven major stormwater drainage basins that have been delineated in Eugene: 1) *Amazon Creek*, 2) *Bethel-Danebo*, 3) *Laurel Hill*, 4) *River Road-Santa Clara*, 5) *Willakenzie*, 6) *Willamette River*, and 7) *Willow Creek*. Note that the areas depicted on Figure 2-2 are the 2002/2012 Stormwater Basin Plans study areas which include the Eugene city limits and the unincorporated area west of Interstate Highway 5 (I-5), and within the metropolitan plan boundary. The unincorporated portion includes land both within and outside the UGB. The City's responsibilities as a DMA apply only to the limits of its jurisdictional authority.

operates the regional Eugene-Springfield Water Pollution Control Facility, a sewage treatment plant with permits to discharge stormwater and treated effluent into the Willamette River, and operates other regional facilities including the Eugene Airport. As such, the City was required to develop a TMDL Plan to describe ongoing and planned activities that will be undertaken to achieve the TMDL pollutant reductions.

Discharges of surface water pollutants come from both point and nonpoint sources. Point sources, those that enter surface waters via a pipe or other conveyance, are regulated through the National Pollution Discharge Elimination System (NPDES) permitting program, administered in Oregon by DEQ. These NPDES permits serve as the TMDL Implementation Plan for the discharges they cover (industrial wastewater, municipal wastewater, industrial stormwater and municipal stormwater). References to these point-source permits and associated plans are included in this TMDL Plan for context. This TMDL Plan emphasizes strategies for the non-point sources of TMDL pollutants within the City's jurisdiction and authority.

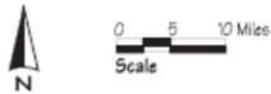
TMDL Plan rules, described in OAR 340-042-0080(3), include a requirement to "Implement and revise the plan as needed" which according to the DEQ TMDL Implementation Plan Guidance (May 2007), includes an annual report of progress on the implementation of each management strategy. This report summarizes the progress of TMDL implementation related activities for the period of time from July 1, 2014 through June 30, 2015, which coincides with the seventh year of implementation and the City's fiscal year 2015.



Drainage Basin Key

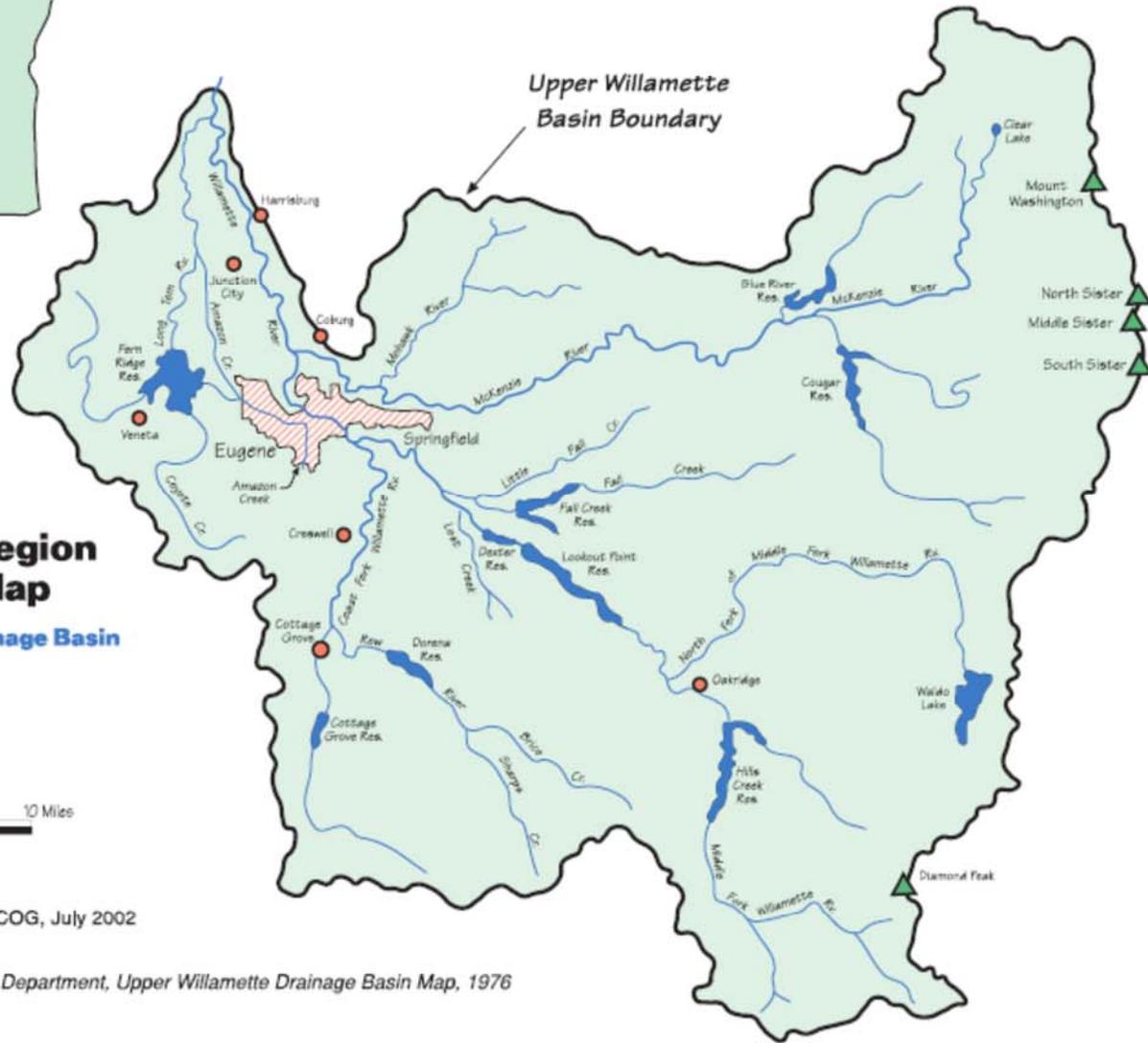
**Willamette Region
Location Map**
Upper Willamette Drainage Basin

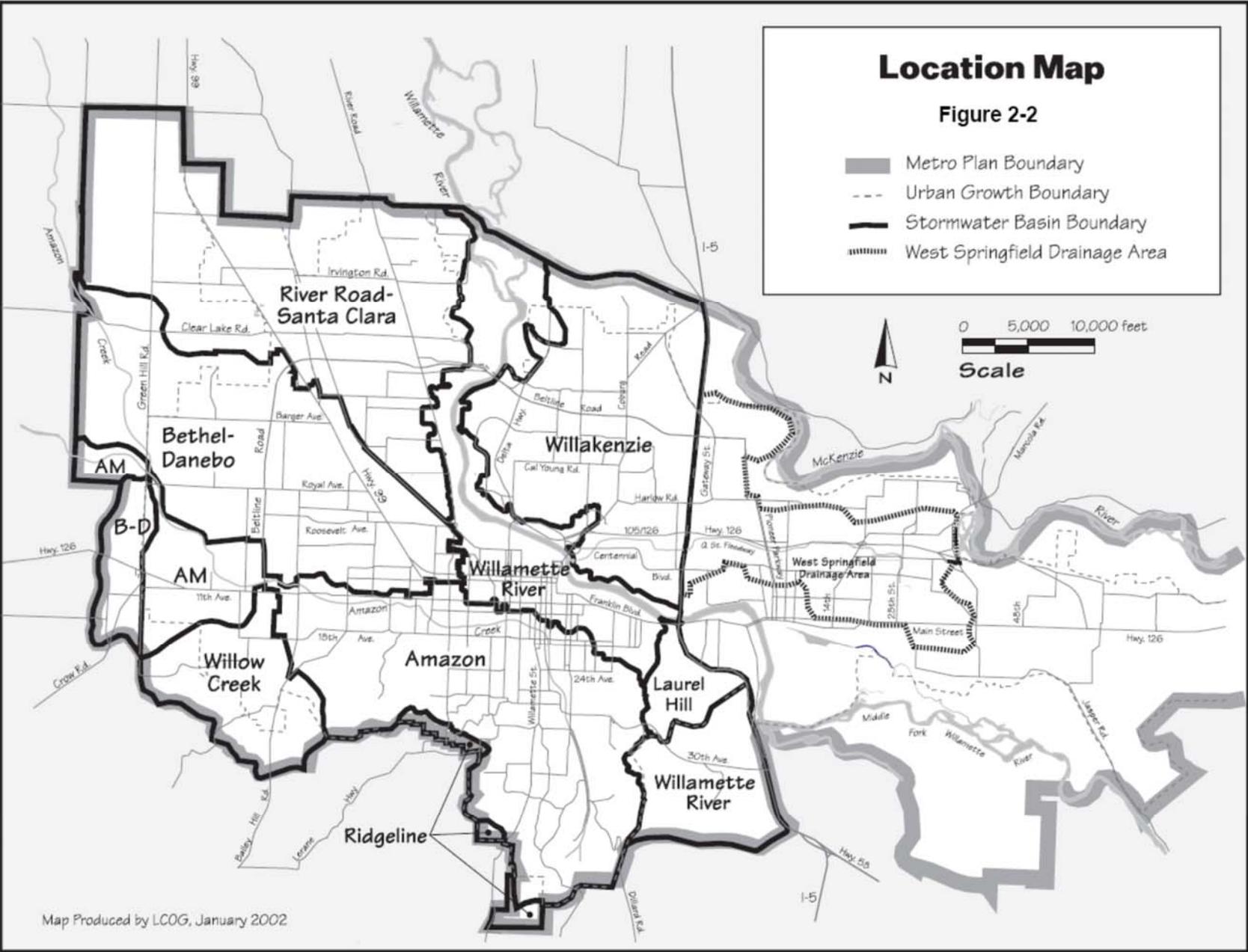
Figure 2-1



Map Produced by LCOG, July 2002

Source: Water Resources Department, Upper Willamette Drainage Basin Map, 1976





Map Produced by LCOG, January 2002

3. LOCAL AREA TMDL WATERBODIES & STRATEGY DEVELOPMENT

Table 3-1 identifies waterbodies addressed by the 2006 Willamette Basin TMDL that lie within or near the City of Eugene and may be affected by activities within the City of Eugene’s jurisdiction. The table includes the river miles affected, the TMDL parameter, and the season affected by the listing.

Table 3-1. Water Bodies and TMDL Pollutants

Subbasin	Waterbody Name	River Miles	Parameter	Season
Upper Willamette	Willamette River	50.6 to 186.5	Temperature	Year Round
Upper Willamette	Willamette River	0 to 149	Bacteria	Fall/Winter/ Spring
Upper Willamette	Willamette River	174.5 to 186.4	Mercury	Year Round
Upper Willamette	A3 Channel	mouth to headwaters	Bacteria	Year Round
Upper Willamette	A3 Channel	mouth to headwaters	Mercury	Year Round
Upper Willamette	Amazon Creek	0 to 22.6	Bacteria	Year Round
Upper Willamette	Amazon Diversion Channel	0 to 1.8	Bacteria	Year Round
Upper Willamette	Amazon Diversion Channel	0 to 1.8	Dissolved Oxygen	Spring/Summer/ Fall
Upper Willamette	Long Tom River	0 to 24.2	Bacteria	Fall/Winter/ Spring
Upper Willamette	Fern Ridge Reservoir	24.2 to 31.8	Bacteria	Fall/Winter/ Spring
Upper Willamette	Fern Ridge Reservoir /Long Tom River	24.2 to 31.8	Turbidity	Year Round
Upper Willamette	Long Tom River	0 to 24.2	Temperature	Summer
Upper Willamette	McKenzie River	mouth to headwaters	Bacteria	Year Round

a. TMDL Strategy Development (2008)

The City's TMDL reduction strategies were first outlined in its original (2008) TMDL Plan. In developing the strategies, the City considered the list of affected waterbodies reflected in Table 3-1, potential sources of TMDL pollutants, source categories and related management strategies listed in the Willamette Basin TMDL Water Quality Management Plan (Chapter 14), and existing City programs and activities which address TMDL pollutants. From that analysis, the City developed reduction strategies for each TMDL pollutant and documented in a matrix the activities implemented or planned to carry out the strategies. The original TMDL Plan and matrix was submitted and subsequently approved by DEQ in 2008. From Year 1 through Year 6 of TMDL Plan implementation (i.e. through June 30, 2014), the City submitted annual reports of progress on implementing the various activities under the original TMDL Plan.

b. Updated TMDL Strategy (2014)

TMDL Plan rules, described in OAR 340-042-0080(3)(a)(C), include a requirement to "Provide for performance monitoring with a plan for periodic review and revision of the implementation plan" which, according to the DEQ TMDL Implementation Plan Guidance (May 2007), includes an evaluation every five years of the plan's effectiveness relative to pollution reduction goals. The City submitted its effectiveness evaluation (Part II of the TMDL Fifth Annual Report and Review) to DEQ on March 23, 2014, and followed up with an updated TMDL Plan. The updated TMDL Plan and matrix was submitted in June 2014. The updated TMDL Plan and matrix, approved by DEQ IN December 2014, describes the City's activities implemented or planned to carry out the strategies as of July 1, 2014, corresponding to the beginning of TMDL Year 7.

4. STATUS OF TMDL IMPLEMENTATION ACTIVITIES

This section includes an updated status for each City TMDL Plan activity (Section 4.a), an update on the other water quality permits relevant to the TMDL (Section 4.b), and an update and accomplishments for other programs relevant to the TMDL (Section 4.c).

a. TMDL Plan Activities

Progress in implementing TMDL activities is summarized in the matrix provided in Appendix A of this report. The matrix includes the same list of activities implemented or planned by the City as in the 2014 TMDL Plan, amended to include progress made over the reporting period from July 1, 2014 through June 30, 2015. As organized in the TMDL plan matrix, TMDL plan-specific activities are grouped into the following categories: waterway protection, restoration and shading; bacteria reduction strategies not associated with existing permits; mercury reduction strategies not associated with existing permits, and outreach and education. Following that, activities relevant to the TMDL but conducted under existing permit programs are then listed by permit and reference the associated report for more information.

b. Water Quality Permits Relevant to TMDL

This Section of the report provides information about water quality permits that cover certain discharges but have their own separate review and reporting processes, and the status of water quality permit programs that the City administers on behalf of DEQ.

As described in Section 2, discharges of surface water pollutants come from both “point” and “nonpoint” sources. Generally speaking, point sources enter surface waters via a pipe or other conveyances, whereas nonpoint sources discharge to surface waters directly or through overland flow (not via pipes or other conveyances). Discharge of industrial wastewater, municipal wastewater, and stormwater into waters of the United States are considered point sources and are regulated under the National Pollution Discharge Elimination System (NPDES) permitting program. The NPDES permitting program is authorized by Section 402 of the Clean Water Act and, in Oregon, the program is administered by the DEQ. The City of Eugene has obtained permits from DEQ under the NPDES program for its point source discharges to surface waters:

- **National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit #101244** (a permit issued to the City of Eugene for the municipal stormwater system discharges)
- **NPDES Wastewater Discharge Permit #102486** (a permit issued to the Metropolitan Wastewater Commission (MWMC) and the cities of Eugene and Springfield for the regional wastewater treatment plant discharges)
- **NPDES General 1200Z Industrial Stormwater Permit for the Eugene-Springfield Water Pollution Control Facility (WPCF) sites** (a permit issued to the MWMC for the wastewater treatment facility stormwater discharges)
- **NPDES General 1200Z Industrial Stormwater Permit for Eugene Airport** (a permit issued to the City of Eugene for the stormwater discharges from the regional airport facility located outside of the Eugene UGB but operated by the City of Eugene)

These permits serve as the TMDL Implementation Plans for the discharges they cover. The annual reports associated with each permit serve as the report of progress required for TMDL implementation, for the discharges they cover. Following is a summary of the frequency and timing of the reporting for each of these permits. For more explanation about the permits themselves, see the City’s TMDL Plan or the respective permits and reports.

NPDES MS4 Permit #101244

The MS4 permit covers the discharges from the municipal stormwater system. The City received its first Phase I NPDES MS4 permit in 1994 and is currently in its third permit term. The current permit was issued on December 30, 2010 and is scheduled to expire on December 29, 2015. The City’s current Stormwater Management Plan (December 2012) best management practices are reflected in the TMDL Plan Implementation Matrix (Appendix A of this report). The City will be submitting a MS4 permit renewal application package by December 29, 2015 which includes an updated proposed SWMP. The City anticipates that the MS4 permit will be administratively extended until DEQ takes action on the fourth term Phase I permit, including its updated SWMP, sometime in 2016 or after. Meanwhile, the December 2012 SWMP is the current stormwater program management plan and will continue to be reflected in Appendix A of this document.

The most recent annual MS4 report (Year 2015 Stormwater Annual Report), covering the reporting period from July 1, 2014 through June 30, 2015, was submitted to DEQ on December 1, 2015. The Year 2015 Annual Report includes the status of each of the 24 SWMP best management practices and the latest water quality monitoring data analysis and long-term water quality trends. The Year 2015 Stormwater Annual Report is available on the City's web site at: <http://ci.eugene.or.us/> (follow links to: Services > Stormwater > Planning, Permits and Regulations > NPDES). At DEQ's request previously, this TMDL report simply references the Year 2015 Stormwater Annual Report, rather than including it within this document.

NPDES Wastewater Discharge Permit #102486 and NPDES General 1200-Z Industrial Stormwater Permit for WPCF sites

The Metropolitan Wastewater Management Commission (MWMC) and the cities of Eugene and Springfield hold a NPDES permit for the discharge of treated wastewater to the Willamette River from the Eugene-Springfield Water Pollution Control Facility (WPCF). The MWMC also holds a permit for stormwater discharges from the WPCF and related Biosolids Management Facility (BMF) site.

- A Discharge Monitoring Report (DMR) for the WPCF is submitted to DEQ monthly, by the 15th day of each month.
- A Pre-treatment Annual Report is submitted to DEQ each year by March 1, covering the entire previous calendar year.
- The 1200-Z report for the WPCF and BMF is completed by July 31st each year, and covers the previous fiscal year (July 1 through June 30).

NPDES General 1200-Z Industrial Stormwater Permit for Eugene Airport

The City of Eugene also holds a General 1200-Z permit for discharges of stormwater runoff from the Eugene Airport site to Amazon Creek and the A1 Channel, both of which eventually flow into the Long Tom River. The 1200-Z DMR for the Eugene Airport is completed each year, covering the previous fiscal year (July 1 through June 30).

Administration of NPDES 1200-Z and 1700-A General Permits

In addition to the point source permits held by the City of Eugene (and MWMC), the City currently acts as an agent for DEQ in the administration of 1200-Z (Industrial Stormwater) and 1700-A (Vehicle and Equipment Wash Water) General Permits inside the Eugene UGB. Yearly reports are submitted to the DEQ via email as a Microsoft Excel database and industrial stormwater program activities are included in the Year Stormwater 2015 Annual Report.

Administration of NPDES 1200-C General Permits

The City also currently acts as an agent for DEQ in the administration of 1200-C (Construction Activities) General Permits inside city limits and outside city limits, inside the Eugene UGB on behalf of Lane County under the City of Eugene/Lane County Stormwater Intergovernmental Agreement described in Section 2(e) of the TMDL Plan. The City's activities related to the erosion program are included in the Year 2015 Stormwater Annual Report.

c. Other Programs Relevant to TMDL

This section provides information about the status and accomplishments of two other program areas relevant to the TMDL, however indirectly: Sustainability and Climate and Energy.

Sustainability

Up-to-date information on the City's Sustainability Program can be found on the City's web site at: [Eugene, OR Website - Sustainable Eugene](#) or go to: www.ci.eugene-or.gov and follow links to: Departments > Central Services > City Manager's Office > Sustainable Eugene.

The City has adopted several sustainability goals to guide its efforts including:

- Reduce community-wide fossil fuel consumption 50 percent by 2030
- Reduce greenhouse gas emissions so that all City facilities are carbon neutral by 2020
- Reduce waste from City facilities and operations 75 percent by 2014 and 90 percent by 2020

In addition to these goals, the City utilizes the Triple Bottom Line as a decision-making framework to advance sustainability. This approach calls for an assessment of potential impacts in social equity, economic prosperity and environmental health in considering projects, policies and budget decisions made by the City.

The City also relies on a volunteer advisory body for community input into its sustainability efforts. The Sustainability Commission advises both City Council and the City Manager on a variety of current sustainability issues and initiatives. For its FY 16 Work Plan, covering the period of time from July 2015 to June 2016, the commission identified several priorities including: 1) integrating and aligning land use and transportation planning including the Transportation System Plan and the Comprehensive Plan (Envision Eugene) 2) meeting community and operational goals for reducing carbon emissions and preparing for climate induced natural hazards, 3) monitoring implementation of Envision Eugene for its impact on climate action goals and 4) promoting sustainable economic development. The FY16 Sustainability Commission Work Plan is available from the Sustainable Eugene web site.

Climate and Energy

In July 2014, Eugene City Council adopted the Climate Recovery Ordinance which:

- 1) Codifies existing internal and community greenhouse gas and fossil fuel goals:
 - a. Reduce total community-wide fossil fuel use 50% from 2010 levels by 2030.
 - b. By the year 2020, all city-owned facilities and city operations shall be carbon neutral.
- 2) Calls for a full assessment of current efforts to meet internal and community climate goals.
- 3) Calls for the development of a science-based community greenhouse gas reduction goal for Council consideration.
- 4) Calls for regular progress reports to Council.
- 5) Establishes a process of analysis, reporting, and readjustment if community or internal targets are not met.

A 2015 Progress Report includes an assessment of current efforts and is available by going to: www.ci.eugene-or.gov and following links to: Departments > Central Services > City Manager's Office > Sustainable Eugene > Sustainable City > Climate Change and Energy Use. The report indicates that the City is on target for meeting the fossil fuel reduction goal but that more effort is

needed to bring down carbon emissions from city operations and facilities. The City is developing a strategy to meet the goal for carbon-neutral city operations and will review and update its existing Community Climate and Energy Action Plan to include measures needed to reach the fossil fuel reduction goal. Some of the areas where emission reductions will be targeted include:

- Infrastructure and policies that support low-carbon transportation modes including electric vehicles, transit, and non-motorized modes (e.g. walking and biking).
- Extensive energy-efficiency retrofits to single family, multifamily, commercial and industrial buildings.
- Installation of renewable energy systems both at the utility scale and in individual buildings to transition away from natural gas and other fossil fuel-based energy.

5. WATER QUALITY MONITORING

The City has conducted ambient and stormwater monitoring at several locations since 1997, approximately 18 years. Yearly monitoring data and analysis and long-term trend information are provided to DEQ annually as part of the MS4 permit reporting. For the latest assessment of water quality conditions through monitoring, see the Year 2015 Stormwater Annual Report, dated December 1, 2015 and available at: <http://ci.eugene.or.us/> (follow links to: Services > Stormwater > Planning, Permits and Regulations > NPDES).

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Appendix A TMDL Implementation Matrix (December 2015)

TMDL Seventh Annual Report, Appendix A - City of Eugene TMDL Implementation Plan Matrix (Updated December 2015)						TMDL Pollutants Addressed ⁽²⁾					Watershed ⁽³⁾		Regulatory Program(s) ⁽⁴⁾									
MS4 SWMP BMP ID (if applicable) ⁽¹⁾	BMP or Activity	Description of BMP or Activity	Measurable Goals & Timeline	Tracking Measures What is being tracked to show progress towards meeting measurable goals	Milestone Intermediate goals to know progress is being made	Progress Reporting Period 7/1/2014 - 6/30/15	Bacteria	Temperature	Hg	DO	Turbidity	Amazon	Willamette	NPDES MS4	NPDES 1200Z - WPCF	NPDES 1200Z - Airport	NPDES - Wastewater	Underground Injection Control	Goal 5	Goal 6	Willamette TMDLs	
WATERWAY PROTECTION, RESTORATION & SHADING																						
Related to BMPs P3 & P5	Enhance streamside shading on public property with an emphasis on Amazon Creek	Document riparian area tree and willow planting. Utilize the Amazon Basin Streamside Shading Assessment to direct tree and willow planting activities in the next five years. Areas within Amazon Creek and its tributaries that do not have riparian vegetation that promotes shading will be emphasized.	Plant trees (goal=200 trees/year, on average) along Amazon Creek and its tributaries. Plant willows (goal=2,000 lineal ft/year, on average) along Amazon Creek and its tributaries.	<ul style="list-style-type: none"> Number/type of trees planted along Amazon Creek and its tributaries annually Number/lineal miles of willow plantings along Amazon Creek and its tributaries annually Number/type of trees planted along other waterways annually Number of willow plantings along other waterways annually Map all new plantings 	Annual review	<ul style="list-style-type: none"> 300 native deciduous trees were planted along Amazon Creek mainstem; 90 trees were planted along Roosevelt Channel, a tributary of Amazon Creek. 3,000 lineal feet (LF) of willow plantings along Amazon Creek; 5,400 LF of willow planted along the A2 Channel and 75 LF planted along Roosevelt Channel, both are tributaries of Amazon Creek. 160 trees were planted along the Willamette River in East Alton Baker Park. 800 LF of willow planted along Spring Creek near Springwood. City maps updated to reflect the year's planting. *Unless otherwise noted, all trees were a mixture of both native broadleaf species (approx. 80%) and native conifers (approx. 20%). 	P	√	P	√	P			x								X
	Enhance streamside shading on private property with an emphasis on Amazon Creek	Coordinate with partners such as watershed councils and other local non-profits to generate interest and address gaps in riparian plantings on private property along Amazon Creek and its tributaries.	Meet one time per year with watershed councils or other non-profits to identify opportunities on private property for potentially incorporating streamside shading.	<ul style="list-style-type: none"> Number of meetings with local watershed councils and other non-profits per year to identify potential shading opportunities on private property in riparian areas 	Annual review	<ul style="list-style-type: none"> Approximately four meetings with Long Tom watershed council regarding the status of voluntary stormwater retrofits and other potential partnership opportunities. 	P	√	P	√	P											X
	Stream buffers/riparian protection	Continue to track and document the implementation of local Goal 5 (natural resources) and 6 (water quality) waterway setback protections.	Track implementation of /WR (Water Resources) and /WQ (Water Quality) Overlay Zones	<ul style="list-style-type: none"> Number of land use and development permit applications involving /WR and /WQ Overlay Zones Number of applications for adjustments to the /WR and /WQ Overlay Zones 	Annual review	<ul style="list-style-type: none"> 2 zone change applications involving /WR; 0 applications involving /WQ 0 applications for adjustments to the /WR and /WQ 	√	√	√	√	√								X	X	X	
Related to BMP E1	Funding for environmental restoration capital projects	As part of existing programs, actively seek external sources of funding including grants and loans for implementing large environmental restoration projects.	Maintain updated list of environmental restoration capital projects and associated planning-level cost estimates.	<ul style="list-style-type: none"> Number of environmental restoration capital projects and planning-level cost estimates 	Annual review	<ul style="list-style-type: none"> Current working stormwater capital projects list includes 22 environmental restoration projects and associated planning-level cost estimates. 							X					X				x
BACTERIA REDUCTION STRATEGIES (NOT ASSOCIATED WITH EXISTING PERMITS)																						
	Siphon lining	Continue efforts to proactively line existing wastewater siphons.	Complete approximately 1 to 3 wastewater siphon lining projects per year.	<ul style="list-style-type: none"> Number and location of wastewater siphon lining projects completed. 	Quarterly updates of wastewater rehabilitation projects via PWE major projects list	<ul style="list-style-type: none"> No wastewater siphon lining projects were completed in FY15; one siphon lining project is planned for construction in 2016. Only two known siphons, within proximity to water features, remain to be rehabilitated. 	√															x

TMDL Seventh Annual Report, Appendix A - City of Eugene TMDL Implementation Plan Matrix (Updated December 2015)							TMDL Pollutants Addressed ⁽²⁾					Water-shed ⁽³⁾		Regulatory Program(s) ⁽⁴⁾								
MS4 SWMP BMP ID (if applicable) ⁽¹⁾	BMP or Activity	Description of BMP or Activity	Measurable Goals & Timeline	Tracking Measures What is being tracked to show progress towards meeting measurable goals	Milestone Intermediate goals to know progress is being made	Progress Reporting Period 7/1/2014 - 6/30/15	Bacteria	Temperature	Hg	DO	Turbidity	Amazon	Willamette	NPDES MS4	NPDES 1200Z - WPCF	NPDES 1200Z - Airport	NPDES - Wastewater	Underground Injection Control	Goal 5	Goal 6	Willamette TMDLs	
								Septic systems	As part of the Wastewater Master Plan update, identify remaining septic systems within the master planning area.	Wastewater Master Plan Update coordinated with Envision Eugene process and timeline	• Wastewater Master Plan included in Public Works Engineering (PWE) Major Projects List.	Quarterly updates of WWMP via PWE major projects list	• Wastewater Master Plan in progress. Evaluation and screening initial list of properties with potential for on-site septic systems approximately 75% complete.	√								
MERCURY REDUCTION STRATEGIES (NOT ASSOCIATED WITH EXISTING PERMITS)																						
	Dental waste	Continue to develop an evaluation mechanism to establish a pollution management practices (PMP) program for dental wastes and the implementation of dental waste best management practices (BMPs). Further data will be gathered using a key point monitoring program combined with on-going influent, effluent and biosolids monitoring. This monitoring will help to ensure the effectiveness of the BMPs as they relate to compliance with currently established effluent limitations for discharge to Eugene and/or Springfield's sanitary sewer collection systems. Upon completion of the evaluation (assuming the desired results are observed) and issuance of a new MWMC NPDES waste discharge permit, a PMP program for dental wastes will be formally adopted and implemented.	Continued evaluation of the ten areas previously outlined in the MOA between ODA, MWMC and the cities of Eugene and Springfield as they correlate to data gathered from key point monitoring and POTW influent/effluent/biosolids monitoring.	• Evaluate effectiveness of compliance with ODA BMPs, for dental offices in Eugene as they relate to existing effluent limitation for discharge to the City's sanitary sewer system.	Evaluate the effectiveness of implementing the 2006 MOA ten specific services as they relate to compliance with existing limitations for discharge to the City's sanitary sewer system.	• Monthly review of POTW influent and effluent Hg monitoring data and seasonal review of biosolids Hg data. • Maintained list of dental offices in Eugene, (4 inspections done during FY 2015), Currently 101 offices being tracked • For each new dental office (1 in FY 2015), evaluated+G3 for the ten areas outlined in ODA BMPs			√							X						x
OUTREACH AND EDUCATION																						
Related to A1, P1	Outreach and education	In coordination with the City's MS4 Permit stormwater program, seek and try out new ways of educating and informing citizens about water quality issues including for TMDL parameters, the impacts of individual actions, and the progress we have made so far in our community.	See MS4 BMPs A1 and P1 below	See BMPs A1 and P1	Annual review	• See Year 2015 Stormwater Annual Report	√	√	√	√	√			X								x
MUNICIPAL SEPARATE STORMWATER SEWER SYSTEM (MS4) NPDES PERMIT																						
Public Education																						
A1	Stormwater Education	Plan, develop, implement and revise as necessary a program to provide stormwater information and education to homeowners, school children, City and other agency staff and the general public about the impacts to stormwater quality and natural resource values from both point and non-point sources of pollution. In addition, educate professional, commercial, and industrial businesses about best management practices that can help prevent and reduce stormwater quality impacts to the public stormwater system and local receiving waters.	• Conduct surveys every two years with Eugene residents to determine attitudes and opinions of residents about the stormwater management program. • Provide SPLASH educational curriculum to teachers and administrators in local school districts. • Develop and implement internal stormwater education to city staff through new employee orientation, "green team" presentations, work group presentations and audio/visual presentation. • Increase catch basin markers with "dump no waste" messages and storm drain covers installed on public improvement projects. • Work collaboratively on education campaigns with other local agencies.	• Number of information materials (all media) prepared and distributed to the public. • Number of students and teachers who use SPLASH curriculum annually. • Number of attendees at public outreach events. • Number of employees attending stormwater education sessions. • Track quantity of installed catch basin markers and storm drain covers. • Identify collaborative campaigns, target audience and summary of campaign. • Documentation of stormwater survey responses.	NA	• See Year 2015 Stormwater Annual Report	√	√	√	√	√			X				X				X

TMDL Seventh Annual Report, Appendix A - City of Eugene TMDL Implementation Plan Matrix (Updated December 2015)						TMDL Pollutants Addressed ⁽²⁾					Water-shed ⁽³⁾		Regulatory Program(s) ⁽⁴⁾									
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P1	Educational Volunteer Program	Manage and support the City's Eugene Park Stewards volunteer program that promotes stormwater education. Provide opportunities to involve citizens of all ages and socio-economic backgrounds in meaningful, hands-on and educationally oriented stormwater related projects. Such projects are aimed at providing both physical benefits and participant awareness related to protecting stormwater quality, fostering citizen stewardship of the City's water resources, promoting the use of native-vegetation, and enhancing fish and wildlife habitat within the local urban watershed.	<ul style="list-style-type: none"> As attrition occurs continue to recruit replacement adoption groups to maintain current levels of participation. Conduct one volunteer work party annually that will address maintenance needs at publicly owned vegetated stormwater facilities with developed parks or the right of way. On average, conduct 12 volunteer work parties per year. Conduct at least one partnership based large-scale water resource clean-up or enhancement volunteer project per year. Correspond with the city's stormwater education program coordinator on a regular basis to determine if there are opportunities to better inform the public regarding the challenges and benefits of stormwater management. 	<ul style="list-style-type: none"> Number of adoption groups that are retained and continue to participate in the volunteer program. Track number of new adoption groups brought into the program. Number of volunteer work parties conducted that involve maintenance of publicly owned vegetated stormwater facilities and number of volunteer participants. Number of work parties conducted and number of volunteer participants. Document annual large-scale project(s), participating partners and number of volunteer participants. Document annually efforts to educate the public about the city's volunteer programs and the protection of water quality as it relates to stormwater. 	NA	• See Year 2015 Stormwater Annual Report	√	√	√	√	√			X								X
Planning, Capital Improvements, and Data Management																						
E1	Stormwater Capital Improvement Projects	<p>Implement the Stormwater capital improvement program (CIP), including projects identified in the City's Stormwater Basin Master Plans (Basin Plans) for Amazon, Willow Creek, Bethel-Danebo, Willakenzie, Laurel Hill, Willamette River, and River Road – Santa Clara basins.</p> <p>The Basin Plans describe a multiple-objective strategy for managing stormwater that addresses water quality protection and improvement, conveyance and flood control, and waterway protection and restoration. The basin strategies reflect the unique characteristics, problems and opportunities in each basin. Volume I contains a prioritized city-wide capital projects list including: water quality facilities in high pollutant source areas, streambank stabilization, stream restoration, and capacity enhancement projects.</p> <p>The Basin Plan capital projects are one of the main sources of capital projects that comprise the City's CIP. In addition to the Basin Plans, CIP projects also originate from a list of maintenance and rehabilitation needs, from focused planning studies such as the Metro Waterways Restoration Study, and other partnership opportunities. The prioritized Basin Plan capital projects are combined with projects from these other sources, re-ranked, and incorporated into the CIP in a timeframe in-line with available budget.</p>	<ul style="list-style-type: none"> Incorporate into the CIP projects list the projects identified in the recently completed 2010 River Road-Santa Clara Basin Plan, by September 2010. Implement Stormwater CIP projects including at least one "water quality facilities in high source areas" project over the five-year permit term, and other retrofits as opportunities arise. 	<ul style="list-style-type: none"> Document completion of River Road-Santa Clara Basin Plan. Track the number, type, watershed location and total drainage area of capital improvement projects constructed for water quality. 	NA	• See Year 2015 Stormwater Annual Report	√	√	P	√	√			X				X			x	

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E3	Stormwater System Mapping and Data Management	Keep up-to-date inventories and maps of the public and private, natural and constructed, stormwater system. Include mapping of public and private water quality and flow control facilities such as grassy swales and detention basins. Develop and integrate asset inventory data and geographic information system (GIS) systems which describe the conveyance system, water quality attributes and related natural resource information. Integrate information generated through BMPs such as E1 (Capital Improvement Projects) and E4 (Development Standards) which create or modify system components and/or change the attributes of the stormwater system.	<ul style="list-style-type: none"> Enter 95% of all newly constructed stormwater system features into inventory databases and GIS within six months of final construction approval. Ensure that 90% of GIS and data application users surveyed rate the GIS/data systems as satisfactory or better. 	<ul style="list-style-type: none"> Report on map and database update activities annually. Survey map and data system users bi-annually. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 							X					X				X
P2	Bacteria Pilot Study	<p>Amazon Creek is water quality limited for bacteria and load reductions of 84% are necessary as specified in the 2006 Willamette Basin Bacteria TMDL.</p> <p>The Bacteria Pilot Study includes three phases: Phase I focuses on efforts to identify source(s) of bacteria, followed by Phase II which focuses on the application of Bacteria Pilot Study BMPs ("BMPs") aimed at reducing bacteria, and followed by Phase III which focuses on evaluating the effectiveness of BMPs that are implemented.</p> <p>Based on monitoring and site assessment work initiated with the 2005 Stormwater Management Plan the overall strategy for continuation of the Bacteria Pilot Study will be a more targeted approach that will narrow down the number of probable sources for investigation of the root of bacterial pollution within a selected study area. This more targeted approach will lead the City towards implementing Phase II and Phase III of the study.</p>	<ul style="list-style-type: none"> Collect and analyze stormwater samples within the study area during at least three (3) significant wet weather storm events per year for the duration of the permit cycle. Report on all field condition assessments completed during the permit year. Show how collected field data is used to confirm or eliminate bacteria sources. Initiate at least two (2) new BMPs by December 2011 that will either identify or rule out specific sources of bacterial contributions to the MS4 within the study area. Starting in July 2012, initiate at least one new BMP per year that will address identified specific sources of bacteria with the study area. Develop an electronic case history file by February 2011 that contains documentation of findings and results that can be utilized by staff to evaluate overall success of study. Report on results of stormwater sampling and analysis in association with implemented BMPs with emphasis on showing the effectiveness of the BMP selected. 	<ul style="list-style-type: none"> Track the number of sampling events, samples collected, and resulting bacteria analysis results. Track the number of field condition surveys conducted, the weather and antecedent weather patterns, and correlate noted conditions with results of sampling analysis. Document additional source identification BMPs, BMP activity and any conclusions derived as a result of conducting the BMP. Document additional bacteria reduction BMPs and BMP activity. Document all follow up sampling and analysis and conclusions derived regarding BMP effectiveness. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 	√						X								X	
Construction and New Development																						
E2	Erosion Prevention and Construction Site Management Program	Administer and monitor an Erosion Prevention and Construction Site Management Program in compliance with Eugene Code 6.625-6.645, preventing and mitigating pollutant and sediment discharges into the city's stormwater system due to construction activities and land disturbance.	<ul style="list-style-type: none"> Conduct one inspection prior to the commencement of work for all erosion permitted sites. Inspect non-erosion-permitted sites at least twice during the life of the building/construction permit or as necessary to assure compliance with the program. Inspect permitted sites monthly or as necessary to assure compliance with the program. Conduct one annual erosion prevention training event. 	<ul style="list-style-type: none"> Number of compliance orders issued. Number of permits issued. Number of inspections. Number of training/outreach events. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 	√	√	√	√			X									X

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E4	Stormwater Development Standards	Administer and monitor a program that implements the city's Stormwater Development Standards, Eugene Code 9.6790-9.6796, Eugene Code 7.143 (3), and associated Stormwater Management Manual. The Stormwater Development Standards regulate the location, design, construction and maintenance of private and public stormwater facilities for flood control, water quality, and natural resource protection.	<ul style="list-style-type: none"> Review stormwater management proposals at the land use and/or development permit stage (i.e. earliest level of review). Review and approve construction plans for stormwater management facilities for all development sites which create 1000 square feet or more impervious surface. Update Eugene's Stormwater Management Manual every two years or as needed to provide new information or practices for post-construction stormwater management. 	<ul style="list-style-type: none"> Number of private water quality facilities permitted with building permits. Number of land use applications reviewed. Number and type of public water quality facilities constructed. Number of training/outreach events held. 	NA	• See Year 2015 Stormwater Annual Report	√	P	√	√	√			X				X				x
P6	Compliance Program for Maintenance of Privately Owned Vegetated Stormwater Facilities	Develop, implement and manage a program to ensure that privately owned and operated vegetated stormwater treatment facilities are maintained so that they function as designed and constructed. The program will employ a combination of rules, protocols and procedures to require: that each private vegetated facility is routinely inspected; that routine and corrective maintenance actions are performed in a timely manner; and that completion of both such activities are regularly reported to City staff. Based on Eugene Municipal Code requirements, penalties and/or other legal remedies will be employed to enforce compliance with these requirements when necessary.	<ul style="list-style-type: none"> Inspect all new vegetated private stormwater facilities at the time of construction and log pertinent information into the stormwater facility tracking database system. Adopt and implement an administrative rule to enforce the maintenance of private stormwater facilities by February 2011. Ensure the inspection of each vegetated private stormwater facility is conducted at least once per year by the owner/operator and an inspection and maintenance log documenting the necessary corrective actions is submitted to City staff annually. Review annual reports for privately-owned vegetated stormwater facilities. 	<ul style="list-style-type: none"> Number of private vegetated stormwater facility inspections completed at time of construction. Number of owner/operator inspection and maintenance logs received and reviewed annually. Number of notices of non-compliance and subsequent enforcement. 	NA	• See Year 2015 Stormwater Annual Report	√	P	√	√	√			X								x
M6	Regulation of Inspection, Maintenance and Reporting of Private Underground Stormwater Structures	Develop, implement and manage a program to ensure that privately owned and operated underground stormwater treatment structures are properly maintained. The program will employ the guidance provided by the required individual Operations and Maintenance (O&M) plan for each structure.	<ul style="list-style-type: none"> Inspect all new private underground stormwater structures at the time of construction and log pertinent information into a database. Establish a correspondence file for each structure/operator. Ensure that each private underground stormwater structure is inspected, maintained and reported on as required by the O&M plan for the specific device. Review annual reports for privately-owned underground stormwater facilities. 	<ul style="list-style-type: none"> Track the number of O&M plans obtained. Track the number of private inspection, maintenance and reporting activities conducted. Track any enforcement activities related to the individual structures. 	NA	• See Year 2015 Stormwater Annual Report	√	P	√	√	√			X								x

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Operations and Maintenance																						
M3	Street Sweeping Program and Leaf Pick-up	Undertake both mechanical brush and vacuum sweeping of publicly maintained roads, bike paths, and parking lots in accordance with the Stormwater Operations and Maintenance Manual. Monitor and evaluate new technology and methods related to street sweeping, and make appropriate adjustments to the current sweeping program when feasible to maximize water quality benefits. +C39	Follow sweeping frequencies as outlined in the Stormwater Operation and Maintenance Manual, more specifically described as follows: • Sweep downtown core twice per week. • Sweep university and industrial areas once per week. • Sweep arterial streets every 2 weeks. • Sweep residential streets every 6-8 weeks. • Sweep bike paths and improved alleys twice per year. • Coordinate and manage two seasonal opportunities for the citizen's leaves to be picked up and managed by the SW operations crew.	• Lane miles swept. • Amount of debris collected. • Amount of leaves picked up.	NA	• See Year 2015 Stormwater Annual Report	√		√	√	√			X								x
M4	Prevent Leaks and Spills from Municipal Vehicles and Equipment	Undertake preventive maintenance program for all municipal vehicles and equipment in order to prevent or correct sources of vehicle fluid leaks. Implement employee education practices and field operations procedures to detect and report leaks and to prevent incidences of fluid and material spills from municipal vehicles. Equip municipal trucks and large mechanized equipment with renewable spill response kits.	• Include a spill procedure card in all City vehicles and equipment by December 1, 2011. • Perform preventative maintenance service on all City vehicles and equipment annually, at a minimum. • During the repair/clean-up process, analyze the type and cause of the spills associated with the repairs conducted by Fleet staff, and evaluate whether operator training maybe helpful with spill minimization.	• Track the number of spill procedure cards issued annually. • Track the number of vehicle related leaks repaired annually. • Track the percentage of vehicles which receive preventative maintenance service annually.	NA	• See Year 2015 Stormwater Annual Report								X								
M5	Public Stormwater System Cleaning Programs - Piped System	Undertake frequent, systematic cleaning of the components of the public stormwater system such as catch basins, pipes, culverts, inlets, and stormwater quality devices in accordance with the adopted Stormwater Operations and Maintenance (O&M) Manual. Document quantities of material removed from each structure. Using the maintenance management system, refine the regular cleaning schedule for pipes, catch basins and stormwater quality devices. Research and monitor developments in maintenance technology and operations and maintenance methods for the closed systems which will further increase the effectiveness of our cleaning practices and water quality improvement practices.	• Clean 50% of the all of the public catch basins and inlet structures annually unless increased efficiencies are shown through adaptive management. • Clean all of the public underground stormwater quality structures as outlined in the Stormwater O&M Manual.	• Track the number of structures cleaned. • Track the amount of debris recovered. • Track the lineal footage of stormwater lines cleaned.	NA	• See Year 2015 Stormwater Annual Report	√		√	√	√			X				X				x

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							M8	Winter Road Sanding and De-icing Program	Apply and clean up winter traction sand on publicly maintained roads and parking areas in conjunction with the application of a pre-wetting agent designed to reduce the need for repeat sanding. Conduct research efforts to identify and evaluate new technology and strategies for application of environmentally friendly chemical anti-icing and de-icing agents. Conduct research into new methods, practices, and efficiencies which may further limit the runoff of sanding related pollutants to the storm system. Conduct preseason staff training on the proper application methods of sand and chemical agents.	<ul style="list-style-type: none"> Minimize the use of abrasive materials for snow and ice control through adaptive management practices. Begin clean-up of abrasive materials when streets become free of ice and snow, and the forecast does not call for more ice and snow within the next 24 hours. 	<ul style="list-style-type: none"> Document the quantities of sanding materials applied and collected during each storm event. Document the volume used for deicing/anti-icing operations. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 							X	
P3	Tree Planting and Information Programs	Manage and support both governmental and community tree planting programs. Provide information to the public about the multiple benefits that trees provide for protecting and enhancing stormwater quality.	<ul style="list-style-type: none"> On average, conduct 12 Eugene Park Stewards volunteer program tree planting projects per year. Include the planting of street trees with all new private developments and with all new public street improvement projects as opportunities arise. Plant 600 trees per year through the Eugene Park Stewards program and the City's regulatory tree planting program. Provide information about the stormwater benefits of trees at major publicly attended events at least 4 times per year. 	<ul style="list-style-type: none"> Track the number of Eugene Park Stewards volunteer program planting projects and the resulting number of trees planted. Track the number of trees planted through new development tree planting requirements and through City-engineered street improvements. Track the number and type of publicly attended events where stormwater related tree information was provided or where a presentation was made. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 		√	√	√	√		X								x
P4	Public Stormwater System Maintenance - Developed Parks and Rights-of-Way	Evaluate and, as necessary, adapt or revise turf, landscape and natural area vegetation management programs for public lands under the City's jurisdiction. Such areas include developed parkland and public right-of-way. The focus of this BMP is to minimize and further limit the discharge of pollutant laden runoff from these areas.	<ul style="list-style-type: none"> Review IPM manual at least once during the permit term, and update and refine the IPM policy document and operations manual in accordance with integrated pest management principles. Conduct periodic inspection of each publicly maintained vegetated stormwater management facility within the right-of-way and developed parks. Populate the stormwater facility tracking system database with current information for each facility that is inspected. Continue to provide services to existing Pesticide Free Parks. All newly developed playgrounds, pools, sprayplay features, recreational areas and other park areas will be evaluated during design or within one year of initial public use for addition into the Pesticide Free Zone program. 	<ul style="list-style-type: none"> Document updates of IPM policy document and operations manual. Document new techniques and practices that are incorporated into park and landscape design. Document the number of publicly maintained vegetated stormwater facilities inspected and information entered into the stormwater facility tracking system database annually. Track the condition of existing parks that are currently maintained using the Pesticide Free Parks protocol. Calculate the total acreage that has been placed in the Pesticide Free Zone Program per year. Utilize Chem Track program to track how much chemical (pound per acre) were used each year and determine total reduction of chemicals used annually. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 	√	√	√	√	√		X								x

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							P5	Public Stormwater System Maintenance – Open Waterways	Maintain and manage open waterways consistent with adopted Open Waterway Maintenance Plans. These plans are intended to protect and enhance stormwater quality and natural resources values while continuing to maintain sufficient conveyance capacity in the waterways.	<ul style="list-style-type: none"> Implement "green piping" (i.e., pruning woody vegetation within active channel zone) on 5 miles of open waterway annually to maintain conveyance. Establish native trees and shrubs on 5000 lineal feet of waterway annually to help shade streams, lower water temperatures, and increase slope stability. Revise all Open Waterway Maintenance Plans by December, 2012. Conduct periodic inspections for publicly-maintained vegetated stormwater facilities (e.g., detention ponds, wetlands, bioswales). Populate the stormwater facility tracking system database with current information for each facility. 	<ul style="list-style-type: none"> Miles of open waterways that are green-piped each year. Track the number of riparian vegetation planting projects, including the number of lineal feet planted, and the number and general type of native species planted (i.e. trees, shrubs, grasses, etc.). Number of channel bank repair projects (e.g., to reduce erosion or slumping) completed each year. Number of times each year that the storm event monitoring program for open waterways is activated. Number of publicly maintained vegetated stormwater facilities inspected and information entered into the stormwater facility tracking system database annually. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 	√	√	P	√	√			X	
Illicit Discharge Controls																						
M1	Management of Illicit Discharges to the Municipal Stormwater System	Discourage and reduce improper discharges into the stormwater system through operation of a stormwater discharge compliance enforcement program. The primary goals of this program are to protect the quality of the receiving waters of the City's stormwater system and to ensure that discharges to the City's stormwater system are in compliance with local, state, and federal regulations to the maximum extent practicable. The City will conduct periodic review of enforcement program practices and procedures and make revisions as deemed necessary.	<ul style="list-style-type: none"> Work to reduce the number of improper discharges into the municipal stormwater system through public outreach and a reasonable enforcement of regulations. 	<ul style="list-style-type: none"> Track the number of stormwater pollution complaints received by the City. Track the number of outfalls inspected annually. Track the number of requests-for-service (RFS) related to illicit discharges to the municipal stormwater system which required enforcement. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 	P	P	P	P	P			X				X				x
M2	Spill Response	Maintain an on-call team trained in spill response procedures involving environmentally hazardous materials and a vehicle equipped for such spill mitigation. Coordinate efforts with other local response teams such as the City of Eugene Fire and Police Departments, Lane County, and state agencies.	<ul style="list-style-type: none"> Maintain a list of HAZWOPER trained personnel that are available for 24-hour emergency response. Maintain and update, as necessary, the City's On-Call Emergency Roster for Environmental Spills. 	<ul style="list-style-type: none"> Up-to-date list of employees trained for spill response. Track number of spills and follow-up details. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 	P	P	P	P	P			X				X				x
M7	Systematic Stormwater Field Screening and Investigation	The Stormwater Field Screening and Investigation program inspects the public stormwater system for condition assessment and the private stormwater system to assess water quality impacts to the municipal stormwater system. Where illicit discharges are found, attempt to identify the source and eliminate the discharge.	<ul style="list-style-type: none"> Improve accuracy of the Stormwater System layer in our Geographic Information Systems (GIS) through map update requests. Identify and remove illicit discharges to the municipal stormwater system through the dry-weather field screening process. Utilize interaction with the public as an educational opportunity to increase stormwater user awareness. Develop "map update" requests based on field inspections and forward this information to the GIS manager for inclusion into the citywide GIS system. 	<ul style="list-style-type: none"> Track the number of map update requests forwarded to the GIS team. Track and create work orders for the system repairs discovered through the inspection process. Track the number of dry-weather field screening inspections and follow-up details. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 	√		P	P	√			X								x

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P7	Litter and Illegal Dumping Control	<p>Manage and support efforts to reduce impacts to stormwater runoff and local receiving waters by controlling litter and debris in public spaces and by removing illegally dumped refuse and debris as well as garbage and trash from illegal camp sites.</p> <p>There are two primary focal points of this BMP. The first is to provide opportunities for proper disposal of litter and trash at strategic publicly owned sites to prevent it from being washed into the public stormwater system. The second is to clean-up illegal dump sites and illegal camp sites prior to pollutants from the trash and debris being washed into the public storm system or the local receiving waters.</p>	<ul style="list-style-type: none"> Ensure all parks, all public space areas managed by the City and all venues for outdoor public events on City lands have adequate trash receptacles. Empty trash receptacles frequently enough to prevent spillage due to being over filled. Ensure at least 75% of all rentals of parks, park shelters, and other City operated outdoor facilities will result in no loose litter and debris left behind. Inspect all major waterways and riverbanks weekly for dumped or discarded debris and illegal campsites. When found, remove dumped materials within two working days. When found, dismantle illegal campsites and clean-up as soon as is physically and legally possible. Monitor all identified historic dumping sites in the public right-of-way and clean-up as necessary at least twice per month. 	<ul style="list-style-type: none"> Track the collection frequency for trash receptacles in City parks and other public space areas managed by the City. Document the number or percentage of rentals of parks, park shelters, and other outdoor venues held on City managed land that forfeit all or part of their clean-up deposit due to excessive litter left behind. Track the number of illegal campsites cleaned-up along riverbanks, waterways, or other public space areas managed by the City. Track the frequency of collection and the amount of debris collected from waterways and from the public right-of-way. 	NA	• See Year 2015 Stormwater Annual Report	√		P	P	√			X								x
Waste Management																						
B1	Household Hazardous Waste Disposal	<p>Support existing efforts and programs within the Eugene metro area to inform citizens of local opportunities for the proper discard and disposal of their household hazardous waste materials. Support and promote facilities and programs that provide such opportunities.</p> <p>The improper disposal of household hazardous waste poses a serious threat to local stormwater quality. Old paint, solvents and thinners, pesticides, bleach, drain cleaners, antifreeze, gasoline, used motor oil and other motor vehicle fluids can easily be flushed into the stormwater system if disposed of in yards, left uncovered in the rain, or poured down driveways or into the street. Supporting efforts to inform homeowners and tenants about where they can properly dispose of these products as well as supporting local household hazardous waste management facilities and efforts is an effective way to reduce the amount of these products that inadvertently make their way into the stormwater system and local receiving waters.</p>	<ul style="list-style-type: none"> Work with Lane County and City of Springfield to annually update "Brown Pages" in the US Dex directory to include new electronics requirements. Update the City's web site periodically to direct residents to the latest information about recycling and waste prevention news, resources, and local events. 	<ul style="list-style-type: none"> Document completion of "Brown Pages" update. Document materials disbursed about household hazardous materials. 	NA	• See Year 2015 Stormwater Annual Report			√	P				X								x

TMDL Seventh Annual Report, Appendix A - City of Eugene TMDL Implementation Plan Matrix (Updated December 2015)							TMDL Pollutants Addressed ⁽²⁾					Water-shed ⁽³⁾		Regulatory Program(s) ⁽⁴⁾									
MS4 SWMP BMP ID (if applicable) ⁽¹⁾	BMP or Activity	Description of BMP or Activity	Measurable Goals & Timeline	Tracking Measures What is being tracked to show progress towards meeting measurable goals	Milestone Intermediate goals to know progress is being made	Progress Reporting Period 7/1/2014 - 6/30/15	Bacteria	Temperature	Hg	DO	Turbidity	Amazon	Willamette	NPDES MS4	NPDES 1200Z - WPCF	NPDES 1200Z - Airport	NPDES - Wastewater	Underground Injection Control	Goal 5	Goal 6	Willamette TMDLs		
B2	Solid Waste Management	Evaluate and revise, as necessary, existing solid waste and recycling collection rules to address stormwater quality. Improper and/or unregulated collection and recycling of solid waste has a serious potential for creating negative impacts to stormwater quality. High collection fees, infrequent or spotty collection service may lead to illegal dumping activity. Unregulated waste containers may be prone to leaking or spilling allowing pollutants to wash into the storm system. By continuing to monitor and evaluate local solid waste management collection efforts, the City will be better able to improve local regulations so that stormwater quality is taken into account.	<ul style="list-style-type: none"> Review Administrative Rule to ensure regulations are up to date and include requirements to support appropriate waste management and prevention. Contract with Oregon DEQ for a waste composition study. 	<ul style="list-style-type: none"> Document total tons of yard debris collected through the curbside program. Document the number of compost demonstration workshops and participants. Document number of enforcement cases related to inappropriate garbage handling. Compare waste composition study with the prior one. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 	√		√	√	P			X								x	
Industrial Facilities																							
W1	Industrial Stormwater Management Program	Provide oversight of stormwater discharges and washing activities from industrial facilities, screening new businesses for those that may require NPDES Permits, conducting inspections and providing technical assistance to industries with NPDES Permits, and responding to spills at facilities with permits.	<ul style="list-style-type: none"> Conduct site inspections on 20% of permitted facilities annually. 	<ul style="list-style-type: none"> Percentage of permitted facilities inspected. Number of corrective action letters sent and follow up responses. Number of Action Plans prepared by permit registrants. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 	√			P	P	√		X								x	
Permit Management																							
E5	Permit Management and Reporting	Administration of the overall NPDES permit compliance effort, including permit renewals, annual reports, program evaluations and documentation of the City's adaptive management processes, and updates to the City's TMDL benchmark assessment.	<ul style="list-style-type: none"> Submit Annual Reports to DEQ, that summarize implementation of the requirements as described in the City's MS4 permit, Schedule B. Evaluate progress towards meeting TMDL pollution reduction benchmarks for each five year renewal submittal. Conduct public involvement within an appropriate time to meet legal requirements for the five year renewal submittals, and for on-going adaptive management as appropriate. 	<ul style="list-style-type: none"> Track public involvement events and number of people reached. Post Annual Reports on City's web site. 	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 	Pollutants are not directly addressed by this BMP, but it is an essential support function for the other program activities							X									X
Monitoring & Reporting																							
Related to E5	Stormwater & Receiving Water Quality Monitoring	Conduct stormwater and receiving water (ambient) monitoring in accordance with Monitoring Plan. Continue to update TMDL management strategies based upon new stormwater and ambient monitoring data.	Analyze and report results to DEQ	Submit Monitoring Report Annually	NA	<ul style="list-style-type: none"> See Year 2015 Stormwater Annual Report 	Pollutants are not directly addressed by this BMP, but it is an essential support function for the other program activities							X									X

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MS4 SWMP BMP ID (if applicable) ⁽¹⁾	BMP or Activity	Description of BMP or Activity	Measurable Goals & Timeline	Tracking Measures What is being tracked to show progress towards meeting measurable goals	Milestone Intermediate goals to know progress is being made	Progress Reporting Period 7/1/2014 - 6/30/15	Bacteria	Temperature	Hg	DO	Turbidity	Amazon	Willamette	NPDES MS4	NPDES 1200Z - WPCF	NPDES 1200Z - Airport	NPDES - Wastewater	Underground Injection Control	Goal 5	Goal 6	Willamette TMDLs
WATER POLLUTION CONTROL FACILITY (WPCF) NPDES WASTEWATER DISCHARGE PERMIT																					
		Meet WPCF NPDES permit effluent limits as they relate to TMDL pollutants	Meet permit effluent limits, as required under NPDES permit	on-going under existing permit; permit renewal in progress	NA	NA	√	√	√								X				x
		Conduct pretreatment program as required under WPCF NPDES permit	Meet permit requirements to track number of inspections and outcomes	on-going under existing permit; permit renewal in progress	NA	NA	√	√	√								X				x
		Prevent overflows, as required under WPCF NPDES permit	Document and report to DEQ overflow-related information (e.g. number of emergency overflows from pump stations and reason for overflow; number of plant upsets and reason), as required under WPCF NPDES permit.	on-going under existing permit; permit renewal in progress	NA	NA	√	√	√								X				x
		Conduct monitoring as required under WPCF NPDES permit	Number of samples taken and parameters analyzed; report results to DEQ	on-going under existing permit; permit renewal in progress	NA	NA	Pollutants are not directly addressed by this BMP, but it is an essential support function for the other program activities										X				x
STORMWATER PERMIT (1200Z) FOR WASTEWATER TREATMENT PLANT																					
		Implement best management practices for wastewater treatment facility under its 1200Z, as they relate to TMDL pollutants.	As required under WPCF NPDES 1200Z permit	on-going	NA	NA	√			√				X							x
		Conduct annual stormwater pollution control training for wastewater treatment plant staff.	As required under WPCF NPDES 1200Z permit	on-going	NA	NA	√			√				X							x
		Conduct monitoring as required under WPCF's NPDES 1200Z permit as it relates to TMDL pollutants.	As required under WPCF NPDES 1200Z permit	on-going	NA	NA	Pollutants are not directly addressed by this BMP, but it is an essential support function for the other program activities							X							x
STORMWATER PERMIT (1200Z) FOR EUGENE AIRPORT																					
		Implement best management practices for Eugene Airport as required under its NPDES 1200Z permit, as they relate to TMDL pollutants.	As required under Airports' NPDES 1200Z permit	on-going	NA	NA	√			√	por.				X						x
		Conduct annual stormwater pollution control training for airport employees.	As required under Airports' NPDES 1200Z permit	on-going	NA	NA	√			√	por.				X						x
		Conduct monitoring as required under Eugene Airports' NPDES 1200Z permit as it relates to TMDL pollutants	As required under Airports' NPDES 1200Z permit	on-going	NA	NA	Pollutants are not directly addressed by this BMP, but it is an essential support function for the other program activities					por.		X							x
⁽¹⁾ MS4 SWMP BMP ID* refers to the MS4 Stormwater Management Plan best management practice identification number as shown in the City of Eugene's SWMP (December 2012).																					
⁽²⁾ √ = Clearly addresses pollutant; P = Possibly addresses pollutant																					
⁽³⁾ Shading indicates that BMP/Program applies within the watershed; no shading indicates that it does not apply within the watershed																					
⁽⁴⁾ X = the TMDL is the primary driver for the management strategy; x = another permit or program is the primary driver, however the strategy addresses one or more TMDL pollutants.																					