

# City of Springfield

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## TMDL Implementation Plan Annual Report 08/09

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Mill Race near South 2nd Street, June 2009

First Annual Reporting Period  
July 1, 2008 thru June 30, 2009





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## **Purpose**

This document fulfills the requirements for annual reporting of progress towards meeting the long term goals of the City's Total Daily Maximum Load Implementation Plan (TMDL IP), as required by the City's TMDL IP dated and approved by the Oregon Department of Environmental Quality (Oregon DEQ) in April of 2009, and provision OAR 340-042-0080 (3) of the Oregon Administrative Rules addressing non-point source pollution.

The purpose is to document progress through the tracking of goals set forth in Springfield's TMDL IP and to present modifications and amendments through adaptive management of the plan.

This document covers the reporting period from July 1<sup>st</sup>, 2008 to June 30<sup>th</sup>, 2009 and is due to the Oregon DEQ by Nov 1<sup>st</sup>, 2009.

## **Background**

The Oregon DEQ set water quality standards to protect waterways in the region for beneficial uses such as domestic drinking water supply, fishing, water contact recreation, fish spawning, and irrigation. Streams, lakes, and rivers that do not meet these standards are included in a list of impaired water bodies. This list, developed in response to Section 303(d) of the Clean Water Act, is referred to as the 303(d) list, and contains the names and descriptions of waterways, or sections of waterways that have failed to meet state water quality standards for one or more listed pollutants.

Both the McKenzie and Willamette Rivers fail to meet State water quality standards for temperature. The Willamette also fails to meet water quality standards for bacteria, and through a complex analysis, has been listed as not meeting state standards for mercury. The Springfield public stormwater drainage system discharges to both of these waterways.

The Oregon Administrative Rule (OAR 340-042-0025) that addresses TMDLs requires local governments, agencies, or major facilities to develop TMDL Implementation Plans for 303(d)-listed waterways within their jurisdiction.

## **Regulatory Context**

This report is submitted to the Oregon DEQ to satisfy the requirements of OAR 340-042-0080 (3)(a)(C) *Provide for performance monitoring with a plan for periodic review and revision of the implementation plan.* All Designated Management Agencies (DMAs) are expected to "implement and revise the plan as needed" [OAR 340-042-0080 (3)(b)].

## **Reporting Requirements**

This Annual Report is required to include the progress and/or status of Springfield's TMDL Implementation Plan's measurable goals. Oregon DEQ refers to this type of monitoring as implementation monitoring and the progress report as an Annual Report. The City of Springfield has chosen to use the **TMDL Implementation Tracking Matrix** as a tool for describing, tracking and reporting TMDL implementation efforts listed under its Plan.

The Implementation Tracking Matrix will provide information about each strategy, implementation methods for each and progress or status in meeting the plan's goals.

While the Implementation Schedule presented in the Implementation Tracking Matrix is realistic, unforeseeable events can and do occur: budget shortfalls, staffing limitations, and changing priorities can impact the rate or success of implementation. For that reason, monitoring to ensure timely and effective program implementation is an important element of the Plan.

## **Summary of Work Accomplishments**

This section is a brief summary of the work that has been done in the reporting period for each of the pollutants. See Table 2 TMDL Implementation Tracking Matrix for status.

### *Temperature:*

- T1 - Inventory Existing and Potential Shade and Enhancement Areas
  - Desktop assessment and priority list have been completed.
  - Completed Arbor Day tree planting and riparian enhancement projects with the Parks and Recreation. District.
  - Facilitated meetings to discuss options for potential "Temperature Credit" partnering with the waste water treatment facility. Temperature shading discussions and options with private industry that have warm water discharges were discussed. Initiated program development for the "Adopt a Waterway" program, and riparian enhancement projects along Mill Race with private property owners has begun.
  
- T2 - Riparian Area, Parking Lot, and Streetscape Shade Enhancement
  - Reviewed and amended the development code to include new technology, designs and ideas for improving water quality (ongoing).
  - Mill Race work with the Army Corps of Engineers (ACOE) staff is ongoing with Phase 1 project expected to in the start summer of 2009 and phase 2 in 2010. Additional grant funding has been identified and applied for. Alternative and

break-out projects such as structure removal, culvert removal, day lighting sections and bank restoration have been identified and prioritized.

- Activities by certain types of businesses were evaluated for their effects on water quality and temperature discharge; outreach materials have been reviewed and new material developed that address temperature as a pollutant.
- T3 - Manage Industrial Warm Water Discharges
  - Staff has reviewed numerous 1200z permits for industry in Springfield's jurisdiction and provided comments to DEQ. Staff has had multiple conversations with warm water dischargers in the area discussing options such as recirculation and cooling processes.
- T4 – Public Outreach and Education
  - Revised and updated existing education and outreach materials, participated in Clean Water Workshops in elementary and middle schools, Channel Restoration school projects, Earth Day, Regional Pressure Washing Campaign, Fish Friendly Car Wash Kit media ads and mailings to schools & community groups, McGowan Creek Environmental Education, Public Works Week, Stormwater Master Plan Open House, Register Guard Worth Repeating columns for Rain Gardens and Barrels, Environmental Leadership Awards with Mayor, Career Day and joined as a partner in the Willamalane Children's Celebration (July 2009).

*Bacteria:*

- B1 - Sanitary Sewer Overflows (SSO) - Work Practices
  - SOPP's and SSO procedures and protocols have been reviewed, updated and adopted for City staff and included in contractor provisions.
- B2 - Animal/Pet Waste - Program Enhancement
  - Meetings with Parks and Recreation, school district, and City maintenance staff identified additional location for pet waste stations. One pet waste station was installed and another scheduled for summer 2009.
  - Pet parks, kennels and pet daycare facilities have been identified and outreach material developed. Site inspections and technical assistance are scheduled to take place summer of 2009.
  - Pet stores have been identified and outreach material developed for store distribution. Some store owners have been contacted and received material during this reporting period, others were contacted in July 2009.
  - Pet waste management for stormwater protection at public events is ongoing as is the City's participation with regional outreach groups.
  - Meetings and discussions have taken place with Parks and Recreation and the Maintenance Division staff regarding waterfowl and nutria feeding. Signs are in draft design and a site list has been developed.

- B3 - Septic Tank, Transient Camping and Private Sanitary Infrastructure Outreach and Education
  - A septic tank inventory is almost complete; sites have been identified and mapped. Contacting property owners, site visits and technical assistance is on schedule.
  - No changes have been made in investigating illicit commercial waste disposal, although the City has an active Illicit Discharge Detection and Elimination (IDDE) program and responding personnel that investigate all illicit discharges as they become known. This task is still on schedule.
  - No changes have been made to the transient camping task during the reporting period for this task. Transient camping and the impacts on water quality have been discussed, although what actions and how City code can be used has not been determined. This task is on schedule.
  
- B4 – Public Outreach and Education
  - Staff revised and updated existing education and outreach materials, participated in Clean Water Workshops in elementary and middle schools, Channel Restoration school projects, Earth Day, Regional Pressure Washing Campaign, Pet Waste Brochure for pet stores, problem neighborhood distribution of pet waste door hangers, Fish Friendly Car Wash Kit notices to schools & community groups, McGowan Creek Environmental Education, Public Works Week, Stormwater Master Plan Open House, Register Guard Worth Repeating columns for Rain Gardens and Barrels, Environmental Leadership Awards with Mayor, Career Day and joined as a partner in the Willamalane Children’s Celebration (July 2009).

*Mercury:*

- M1 - Limit Construction Site Erosion
  - The Land Drainage and Alteration Program (LDAP) staff worked on and made changes for streamlining the permit process and started working on new municipal code addressing LDAP code and erosion concerns. This process is ongoing and on schedule.
  - No actions have been taken in discussions with the DEQ to receive delegated authority on 1200-C permitting within City.
  
- M2 - Enhance Post Construction Support
  - Water Resource staff is active in Plans Review, Pre Development Review, Development Review and Pre Construction meetings. This task is ongoing and expected to be more “hands-on” when staffing allows.
  - A BMP inventory and inspection program has been initiated. Program guidance has been drafted, inventory collection and digitizing has begun, inventory and inspection criteria are being drafted and O&M guidance is being drafted.

- M3 - Evaluate/Enhance Street Sweeping, Catch Basin, and Pipe Cleaning Programs
  - The review and adaptive management of the street sweeping, catch basin & pipe maintenance programs, and equipment evaluation and scheduling is an ongoing task. Water Resource staff works with Maintenance staff to identify program gaps and research new equipment and available technology.
  
- M4 - Hazardous Waste Control
  - Public Works staff held the annual Springfield Cleanup event that collects electronics for recycle and proper disposal. The City continues to be an active member of regional groups that address household hazardous waste roundups.
  - Springfield's Industrial Pretreatment program continues the administration of a dental Pollution Management Program (PMP) in cooperation with the Oregon Dental Association. Site inspections and technical assistance was provided to numerous dental facilities with more facilities to be inspected summer of 2009.
  - Environmental Services staff participates in the Regional "Eco Biz" Program that addresses and promotes mercury "switch out" and recycling with local auto shops.
  
- M5 – Public Outreach and Education
  - Revised and updated existing education and outreach materials, participated in Clean Water Workshops in elementary and middle schools, Channel Restoration school projects, Earth Day, McGowan Creek Environmental Education, Public Works Week, Stormwater Master Plan Open House, Register Guard Worth Repeating columns for Rain Gardens and Barrels, Environmental Leadership Awards with Mayor, Career Day and joined to be a partner in the Willamalane Children's Celebration (July 2009).

### **Adaptive Management Measures**

The Implementation Tracking Matrix includes target dates for the implementation of each of the measures included in this Plan. Where implementation of a particular measure is infeasible or unavoidably delayed, staff will evaluate the cause. Options include adaptively managing to facilitate implementation of the measure, developing an equivalent measure, or working with the DEQ to develop a strategy for accomplishing a similar result using an alternate method or schedule. See Table 1 for adaptive management amendments and/or comments.



Table 1 - Proposed TMDL IP Adaptive Management Amendments (AMA)

<b>Pollutant</b>	<b>Strategy</b>	<b>Current Status June 2009</b>	<b>Current Benchmark</b>	<b>Measureable Goal Timeline</b>	<b>Amendment / Comment</b>
Bacteria	B2 - Animal/Pet Waste - Program Enhancement	95% complete	Identify pet supply stores within Spfld. and promote pet waste management brochure distribution to them.	A list of Spfld. pet supply stores and facility contact made  By January 2009	Request to have the Goal date changed to July 2009  This task was 99% completed by the end of this reporting period; a list of sites was identified by the Jan 2009 goal date. Educational material was developed and distributed to some locations in June 2009. The rest of the locations received educational material on July 2 <sup>nd</sup> , 2009.  Staffing and budgeting caused an unavoidable delay in achieving the goal deadline; eventually the goal was met, just later than expected.
Bacteria	B3 - Septic Tank, Transient Camping and Private Sanitary Infrastructure Outreach and Education	Initial development started	Develop procedures and priority site determination criteria with PD and Maintenance staff.  Work with land owners to enforce illegal camping regulations.	Review and development of policies and procedures. Development of a priority list, deterrent option list and a tracking program.  By July 2009 & By Dec 2009	This task was not required to be completed during this reporting period, but will be for the next reporting period. Staffing and budget caused an unavoidable delay in starting this task.  Currently this task is moving forward and is 5% complete. Spfld. requests a timeline change in advance in order to meet this goal.  Request change to be Dec 2009 and June 2010, which will still require the goal to be met in reporting year 2.



## Implementation Matrix

The following matrix details the strategies that will be implemented within the next five years. The matrix displays the pollutant being addressed, the strategy to address it, when that strategy will be implemented, and how to measure progress and successful implementation

**Table 2 - TMDL Implementation Tracking Matrix**

POLLUTANT	SOURCE of POLLUTANT	STRATEGY <i>What we are doing &amp; will do to reduce pollution from this source</i>	ACTIONS <i>Specific ways to implement strategies</i>	BENCHMARK <i>Intermediate indicators to know progress is being made</i>	TIMELINE	MEASURE <i>How we will track implementation &amp; completion</i>	STATUS
Temperature	Solar radiation to surface waters	T1 - Inventory Existing and Potential Shade and Enhancement Areas	Develop a priority project list for shading.	Conduct a desktop inventory and assessment process for identifying shade potential sites.	By May, 2009	Prioritization list of potential sites.	100% complete
			Work to develop public/private partnerships for demonstration projects.	Develop a proposal for partnering on shading projects.	By July, 2009	Meet with selected groups and propose partnerships to develop shading projects.	100% complete and ongoing
		T2 - Riparian Area, Parking Lot, and Streetscape Shade Enhancement	Code review, evaluation and enhancement for parking lot, streetscape shade and riparian vegetation management, setbacks and buffers, and retrofit practices if appropriate.	Review the Development Code with key planning staff, and determine if shading or riparian protection amendments are appropriate.	By May, 2009	Review of Development Code for enhancement of riparian setbacks.	100% complete
				If amendments are appropriate, develop & propose to Council or work to include them in an amendment package.	By December, 2010	Proposals brought to Council.	100% complete
			Mill Race restoration and temperature mitigation.	Continue to fully participate with ACOE staff contacts and meetings.	Participation is on going	Continue to participate with ACOE staff contacts and meetings.	100% complete and ongoing
				Explore additional or alternative funding and project phasing & explore alternative funding options & sources.	Phasing by July, 2009 Funding by Dec., 2009	Development of alternative projects, funding options and source list.	100% complete and ongoing
	Work with the ACOE in identifying discrete project tasks that can advance overall restoration.	Priority tasks list by December, 2009	Development of a priority project tasks list	100% complete and ongoing			
	Outreach and education to groups, citizens, businesses and industry.	Include discussion of heat as a pollutant into the existing outreach and education program.	By May, 2009	Development & inclusion of temperature management in education materials, presentations, public events & meetings with industry.	100% complete and ongoing		
	Warm water discharges	T3 - Manage Industrial Warm Water Discharges	Work with industrial sources and Oregon DEQ to address warm water discharges thru the NPDES permit program.	Staff will continue to work with industry and State regulators to find acceptable management resolutions.	In process and ongoing until revisions made to industry discharge permits	Acceptable management resolutions and revision made to industry's discharge permits by the DEQ.	100% complete and ongoing
	Public Interaction	T4 - Public Outreach and Education	Develop and distribute outreach and education materials to the public.	Staff will evaluate needs, types of temperature related activities effecting water quality, material options and sources.	In process and ongoing, re-evaluation by January 2010	Staff will continue to work with other agencies and independently in the evaluation, addressing needs and discussions on types of temperature related activities effecting water quality, Staff will continue to develop/distribute material and research options and sources.	100% complete and ongoing

Bacteria	Sanitary sewer system	B1 - Sanitary Sewer Overflows - Work Practices	Review current standard operating procedures for spill response. Amend or revise if appropriate.	Review relevant SOPPs for spills and overflows.	By January, 2009	Review completed	100% complete
				Develop/amended SOPPs, if needed.	By July, 2009	Adoption of new or amended SOPPs if appropriate	100% complete and ongoing
			Review contractor work provisions to ensure contractors know and understand Spfld. requirements for sanitary spill.	Conduct review of relevant Springfield standard contracting specifications.	By July, 2009	Review of contract specifications	100% complete and ongoing
				Develop revisions, if needed	By December, 2009	Adoption of new or amended contractor work provisions, if needed	100% complete and ongoing
	Animal/Pet waste	B2 - Animal/Pet Waste - Program Enhancement	Coordinate with Willamalane Park & Recreation Dist. to identify additional sites for pet waste disposal stations in public area used by pet owners. Assist with placement and maintenance.	Meet with Willamalane & Maint. staff to identify prospective locations for pet waste stations.	By January, 2009	Development of a list of possible locations. Program is ongoing.	100% complete and ongoing
				Coordinate installation of new sites if appropriate locations found.	By July, 2009	Installation completed at sites.	100% complete and ongoing
			Inspect pet parks, kennels, and pet day care sites to ensure proper waste handling.	Identify existing/proposed pet parks, kennels and pet day care facility owners/operators to ensure proper pet waste management.	By August, 2009	List developed of dog park owners, kennels & pet day care facilities. Contact facilities & request inspections for waste management.	95% complete
			Continue pet waste outreach and education work with citizen groups, students, at public events and include targeted businesses.	Identify pet supply stores within Spfld. and promote pet waste management brochure distribution to them.	By January, 2009	A list of Spfld. pet supply stores and facility contact made.	99% complete – see AMA request
				Review and update educational material for distribution as needed, and distribute to willing business owners.	By July, 2009	Review and approval of updating current material and the development of new material.	100% complete and ongoing
			Waterfowl and Nutria feeding outreach and education.	Coordinate with Park & Rec and City Maintenance staff to identify area locations of wildlife feeding.	By July, 2009	List developed of locations.	100% complete and ongoing
				Develop educational signs related to feeding wildlife and the impacts on water quality.	By December, 2009	Signs developed and posting started.	80% complete
			Sanitary wastes	B3 - Septic Tank, Transient Camping and Private Sanitary Infrastructure Outreach and Education	Identify septic systems in the City limits; assess feasibility or need for connection to City sanitary sewer.	Initiate a septic system inventory program for the City.	By July, 2009
	Contact owners – gather condition information and interest.	By December, 2009				Contact owners, information gathered	40% complete
	Develop and deliver outreach and educational materials to owners.	by January, 2010				Distribution of outreach and educational material	10% complete
	Continue investigations into illicit commercial waste disposal practices.	Continue current efforts, AND develop informational handouts targeting other possible sources.			By January, 2010	Review and approval of updating current material and the development of new materials.	5% complete
	Review transient camping procedures, and focus additional efforts where sanitary waste or other waste impact open waterways. Seek enforcement through existing codes/statutes, as resources allow.	Develop procedures and priority site determination criteria with PD and Maintenance staff.			By July, 2009	Review and development of policies and procedures. Development of a priority list, deterrent option list and a tracking program.	5% – see AMA request
		Work with land owners to enforce illegal camping regulations.			By July, 2009		5% – see AMA request
		Assess known campsites on public land and establish a priority list for removal. Investigate campsite deterrent measures.			By December, 2009		5% complete
	Public Interaction	B4 – Public Outreach and Education	Develop and distribute outreach and education materials to the public.	Staff will evaluate needs, types of bacteria related activities effecting water quality, material options and sources.	In process and ongoing, re-evaluation by January 2010	Staff will continue to work with other agencies and independently in the evaluation, addressing needs and discussions on types of bacteria related activities effecting water quality, Staff will continue to develop/distribute material and research options and sources.	100% complete and ongoing

Mercury	Construction site soil erosion	M1 - Limit Construction Site Erosion	Review existing LDAP program, identify any additional program needs & assist with modifications to enhance program effectiveness. Initiate discussions with DEQ staff for Spfld. to receive delegated authority from DEQ on 1200-C NPDES permitting within the City limits	Review program, determine program revisions and enhancements, if appropriate.	By January, 2010	Review and updates made to the current program, if needed.	100% complete & ongoing
				Draft "MOU" between Springfield and DEQ	By December, 2010	City Council approval of "MOU"	Not started
		M2 - Enhance Post Construction Support	Continue Water Resources staff participation in plan review & expand reviews by Water Resource staff into more involvement in the approval process.	Expand level of review involvement by engaging in the review process for proposals requiring engineering review.	By January, 2009	Expanded involvement in review development proposals requiring engineering review for water quality impacts.	100% complete and ongoing
			Initiate development of a post-construction BMP inspection program to ensure maintenance of WQ BMPs at private sites.	Identify needs, assess available staff and resources.	By December, 2009	Staff and resource needs assessed.	100% complete & ongoing
			Pursue program implementation within resource limitations.	By July, 2010	Development of an inspection program, if funding and staffing is determined to be feasible.	25% complete	
	Urban street runoff	M3 - Evaluate/Enhance Street Sweeping, Catch Basin, and Pipe Cleaning Programs	Review with PW Maintenance staff the current street sweeping, catch basin & pipe maintenance programs, equipment, schedule, and identify program gaps.	Review existing sweeping and CB and pipe cleaning programs, equipment, technology and complaints with Maintenance staff and develop adaptive management measures as needed.	Annual review May, 2009	Review, approval and implementation of any updates to the current programs.	100% complete & ongoing
	Hazardous waste control	M4 - Hazardous Waste Control	Use household hazardous waste collection events to reduce the improper disposal of items containing mercury.	Springfield will continue to participate in the support of the Lane County household hazardous waste events including outreach at public events such as the Lane County Fair, Springfield cleanup and Earth Day.	Ongoing annually	Participate in Public collection events and promote outreach.	100% complete & ongoing
			Continue the implementation of pollution management practice (PMP) program for local offices designed to address and prevent mercury waste from dental amalgam from entering the wastewater system.	Springfield's Industrial Pretreatment program will continue the administration of a dental PMP program in cooperation with the Oregon Dental Association.	Ongoing with expected evaluation and site inspection by January 2010	Records are maintained through program and reported as required.	100% complete & ongoing
	Public Interaction	M5 - Public Outreach and Education	Develop and distribute outreach and education materials to the public.	Staff will evaluate needs, types of mercury related activities effecting water quality, material options and sources.	In process and ongoing, re-evaluation by January 2010	Staff will continue to work with other agencies and independently in the evaluation, addressing needs and discussions on types of mercury related activities effecting water quality, Staff will continue to develop/distribute material and research options and sources.	100% complete & ongoing

