



Please find enclosed the 2015-2016 City of Philomath TMDL annual report.

**CITY OF PHILOMATH**  
**Water Quality TMDL Implementation Plan**  
**2015-2016**  
**Year 5**

**Introduction**

This Water Quality Implementation Plan describes the actions Philomath will undertake to address total maximum daily pollution load allocations in the Marys River, which is the receiving stream of stormwater from the City of Philomath. Philomath has an approved Storm Water Management Program (SWMP) (Appendix A). A NPDES Phase II MS4 Stormwater Discharge Permit was issued to the city May 8, 2007. The current Discharge Permit expired on April 30<sup>th</sup>, 2012 and Philomath has turned in all relevant applications and documentation on time for renewal. The City has also met with Benjamin Benninghoff of DEQ in 2012 regarding the renewal of the permit and confirmed that DEQ has received the proper renewal documents. Philomath has followed Mr. Benninghoff's recommendations made during our meeting and have continued to follow the BMP's set forth in the previous permit.

This plan does not duplicate the City's S.W.M.P. and will be limited to T.M.D. L. issues not addressed in The City's S.W.M.P. This Plan is compatible with relevant State land use planning goals as identified in the City's 2003 Comprehensive Plan. Specific Comprehensive Plan Policies that further this Plan's objectives are identified under Goal 6, policies # 4&5 and Goal 5, policy #1.

**Current Condition of Marys River**

The overall goal of the W.Q.I.P. and the City's S.W.M.P. is to reduce or eliminate sources of pollution entering Marys River via stormwater runoff from the City of Philomath. Marys River exceeds water quality standards for Temperature, Mercury, Dissolved Oxygen, Iron Manganese, and fecal coliform bacteria. Although fecal coliform bacteria has been de-listed, the City of Philomath will continue to address this issue. The primary cause of elevated temperatures is solar radiation due to loss of mature riparian vegetation. Increased populations of fecal coliform bacteria are usually the result of failing septic systems or discharge of pet waste into streams.

### **Status of Philomath**

Philomath has very little jurisdiction over Marys River Frontage (approximately one half mile) all of which is city owned or designated as parkland, and is protected from development. This parkland is only one side of the Marys River as the river runs by, not through, the City of Philomath in this area. The City owns and maintains the park, but it is an Oregon State Lands listed Wetland. The city owned and parkland river frontage vegetation is either undisturbed or has been restored. The City's development code requires a fifty-foot riparian set back area from Newton Creek, the only small tributary within the City's jurisdiction. Philomath is served with sanitary sewer within its jurisdictional boundaries and has no combined sanitary/storm drains. Treated sewage effluent is discharged only during winter months. Recent upgrades to the sewer lagoon system enables the City to land apply some of its treated wastewater to farm fields reducing discharges to the Marys River. Sewer overflows occur rarely and only during extreme winter flooding conditions. Philomath sewage treatment facility discharges are permitted under N.P.D.E.S. permit #102060. Philomath ordinances require picking up and disposing of pet excrement and pens or shelters to be kept clean and sanitary.

### **Conclusions**

Upon review of typical causes of high stream temperatures and increased populations of fecal coliform bacteria in the Marys River compared to current city conditions, policies and regulation addressing these issues, the City believes that with only approximately one-half mile of river frontage, two stormwater outfalls to the Marys River and Newton Creek which is a small (1.5 mile long) tributary that runs through mostly undeveloped or park land, that we are not a significant contributor of T.M.D.L. pollution in the Marys River. DEQ and the City of Philomath, in partnership, will make ongoing evaluations to determine the extent of Philomath's contribution of T.M.D.L. pollutants and which actions may be necessary to address any contributions of pollutants that may exist.

### **Actions**

The City remains committed to reduce or eliminate pollutant loads in Marys River and Newton Creek and will implement the following actions. The importance of riparian vegetation, stream flow volumes, wetland habitat and erosion prevention and their relationship to river temperatures as well as the importance of properly functioning septic systems, and appropriate agricultural practices to reduce or eliminate bacteria will be included as a portion of the education and outreach portion of the City's S.W.M.P. There are no known septic systems in use within the city limits. Septic systems within the UGB, but outside the city

limits are under Benton County's S.W.M.P. and/or T.M.D.L. plan. If at such a time septic systems may come under the City's jurisdiction, (such as through an annexation) the City will make necessary changes to the S.W.M.P. and T.M.D.L. plan by implementing actions taken by Benton County. The City's existing ordinances regarding riparian setbacks and sanitary conditions for pets will be rigorously enforced. Pet waste stations have been installed in all city parks. The City will continue providing a weeklong "Spring Cleanup" program with dumpsters that will be available in a central location for residents to bring yard debris, scrap wood and metal, electronics and cardboard to be recycled and/or disposed of.

**Monitoring, evaluation, reporting and adaptive management.**

Philomath will conduct monitoring to track its efforts to protect and improve water quality in Marys River. An effectiveness monitoring program will indicate whether activities performed in accordance with this plan are effective in achieving plan goals. Monitoring activities conducted by Marys River Watershed Council and information collected at Philomath's Water Treatment Plant should be adequate to provide effective baseline water quality data. The City of Philomath has been monitoring at least 10 sites monthly for temperature, Dissolved Oxygen, pH and turbidity for several years. While grab samples have been the method for sampling, in the future Philomath would like to deploy some composite type sampling devices and/or temperature loggers. As most locations that are sampled during the year are either stagnant or dry nearly half the time, the cost for monitoring equipment seems costly for what little data may be retrieved and useful. Monthly grab sampling may provide some useful data, but it also allows a monthly check of the outfall location that is being sampled. Marys River Watershed Council data may be suitable to provide for future monitoring needs. Philomath will also track permits issued, specifically those that require riparian setbacks, and Philomath Ordinance Enforcement in regards to pets and pet enclosure activities. This information will be evaluated to determine the impact on Stormwater pollution. Progress will be noted in the annual report presented to the DEQ. This plan will also be evaluated on a more extensive basis every five years to determine if the plan adequately addresses the City's water quality concerns. Depending on evaluation results, this plan and/or the City's S.W.M. P. may be altered to improve water quality in Marys River.

**Funding**

The City will use funding from its storm water fee. This fee is a flat rate fee that is accessed to home owners and a total square footage of non pervious surface for commercial properties.

## Philomath TMDL WQIP at a Glance 2015-2016 Year 5

<b>Pollutant</b> What pollutants does the TMDL cover?	<b>Source</b> What sources of this pollutant are under your jurisdiction?	<b>Strategy</b> What is being done, or what will you do to reduce and/or control pollution emanating from this source?	<b>How</b> Specifically, how will this be done?	<b>Measure</b> How will you demonstrate successful implementation or completion of this strategy?	<b>Timeline</b> When will the strategy begin? Be completed?	<b>Benchmark</b> What intermediate goals will be achieved, and by when, to know progress is being made?	<b>Status</b>
Temperature	1. Solar radiation input	a. Maintain existing vegetation. b. Add information regarding temperature to education and outreach portion of City's SWMP. c. Take advantage of repairing and adding riparian vegetation projects with Philomath schools and/or other groups.	Philomath development code riparian setback requirements.	Enforce code requirements  Track violations	Strategies have begun and will be ongoing.	Inspect city controlled riparian areas regularly  Inspect city controlled riparian areas after each windstorm	1. Inspected riparian areas monthly, most notably after high winds and waters.  2. Removed several broken limbs from trees.  .  4. See below

4. Planted a total of 10 trees along Newton Creek through City Park. Had a tree planting clinic with approximately 120 3<sup>rd</sup> grade students from the Philomath Elementary School and Kings Valley Charter School. Each student planted their own seedling to take home. Also provided storm water training with the event.

Pollutant What pollutants does the TMDL cover?	Source What sources of this pollutant are under your jurisdiction?	Strategy What is being done, or what will you do to reduce and/or control pollution emanating from this source?	How Specifically, how will this be done?	Measure How will you demonstrate successful implementation or completion of this strategy?	Timeline When will the strategy begin? Be completed?	Benchmark What intermediate goals will be achieved, and by when, to know progress is being made?	Status
Bacteria	Pet and animal waste.	<p>a. Keep city clean and sanitary.</p> <p>b. Install pet waste stations in city parks.</p> <p>c. Add information regarding bacteria to education and outreach portion of City's SWMP</p>	Philomath ordinance animal control section.	<p>Enforce code requirements for animal sanitation.</p> <p>Track violations</p>	Strategies have begun and will be ongoing.	Monitor use of pet waste station supplies.	Pet waste stations still seem to be showing substantial use from pet owners. Used ~8500 bags this permit year.
Mercury	<p>1. Stream bank erosion.</p> <p>2. Street debris</p>	<p>a. Require 1200C permit for development over 1 acre in size.</p> <p>b. Sweep streets on a regular basis.</p>	<p>1. Develop an Erosion and Sediment Control Ordinance.</p> <p>2. Schedule sweeping on a weekly basis.</p>	<p>1. Adoption of Erosion and Sediment Control Ordinance that also addresses 1200c permit.</p> <p>2. By sweeping on a regular basis</p>	<p>2012 Completed</p> <p>2. Strategy already in place and is ongoing.</p>	<p>1. Partnering with Benton County to establish an Erosion and sediment Control Ordinance.</p> <p>2. Monitoring amount of debris found in catch basins during routine cleaning.</p>	<p>1. Benton County will continue to inspect and enforce the Erosion control and the Post Construction ordinances for Philomath through the IGA,</p> <p>2. Sweeping on a weekly basis.</p> <p>1. See below</p>

1. Finished thinning brush and rotted broken trees along East Newton Creek. Replanted 3 trees along the creek (see above). Met with Marys River Watershed Council regarding Newton Creek restoration. Marys River Watershed Council offered their volunteers to work the restoration project to help eliminate erosion and loss of habitat.