AGENDA

MOLALLA CITY COUNCIL MEETING

March 14, 2018
7:00 PM
Molalla Adult Center
315 Kennel Ave., Molalla, OR 97038

Mayor Jimmy Thompson

Council President Elizabeth Klein | ***Councilor Glen Boreth***
Councilor Leota Childress | ***Councilor Cindy Dragowsky***
Councilor DeLise Palumbo | ***Councilor Keith Swigart***

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1. ***CALL TO ORDER***
- **A.** Convene Regular Meeting and Roll Call
- **B.** Pledge of Allegiance

2. ***PUBLIC COMMENT/COMMUNICATIONS AND PRESENTATIONS***
- A. Presentation from Kittelson & Associates presenting the *Molalla Transportation System Plan Update*.
- B. Presentation from Merina & Company Regarding the FY 2016/2017 Audit.

(Citizens are allowed up to 3 minutes to present information relevant to the City but not listed as an item on the agenda. Prior to speaking, citizens shall complete a comment form and deliver it to the City Recorder. The City Council does not generically engage in dialog with those making comments, but may refer the issue to the City Manager. Complaints shall first be addressed at the department level prior to addressing the City Council.)

3. ***ADOPTION OF AGENDA***

4. ***CONSENT AGENDA***
- **A.** City Council Minutes – February 28, 2018 Minutes
- **B.** Correspondence – N/A

5. ***ORDINANCES, RESOLUTIONS, PROCLAMATIONS***
- **A. N/A**

6. ***NEW BUSINESS***
- A. **Discussion and/or Action on** The Fifth Year Review of the *Total Maximum Daily Loads* (TMDL) Plan and the 2015-2020 *TMDL Implementation Plan*.
- B. **Discussion and/or Action on** *Buckeroo Association Parking Agreement* with Molalla Rotary Club and City of Molalla.

7. ***OLD BUSINESS***
- **A. N/A**

8. ***REPORTS AND ANNOUNCEMENTS***
- **A. City Manager and Staff**
- **B. City Councilors**
- **C. Mayor**

9. *EXECUTIVE SESSION*

Held pursuant to Oregon Public Record Law, ORS 192.660(2):

(a) To consider the employment of a public officer, employee, staff member or individual agent.

(b) To consider the dismissal or disciplining of, or to hear complaints or charges brought against, a public officer, employee, staff member or individual agent who does not request an open hearing.

(c) To consider matters pertaining to the function of the medical staff of a public hospital licensed pursuant to ORS 441.015 to 441.063 and 441.196 including, but not limited to, all clinical committees, executive, credentials, utilization review, peer review committees and all other matters relating to medical competency in the hospital.

(d) To conduct deliberations with persons designated by the governing body to carry on labor negotiations.

(e) To conduct deliberations with persons designated by the governing body to negotiate real property transactions.

(f) To consider information or records that are exempt by law from public inspection.

(g) To consider preliminary negotiations involving matters of trade or commerce in which the governing body is in competition with governing bodies in other states or nations.

(h) To consult with counsel concerning the legal rights and duties of a public body with regard to current litigation or litigation likely to be filed.

(i) To review and evaluate the employment-related performance of the chief executive officer of any public body, a public officer, employee or staff member who does not request an open hearing.

10. *ADJOURN*

Agenda posted at City Hall, Senior Center, Library and the City Website at http//www.cityofmolalla.com/meetings
This meeting location is wheelchair accessible. Disabled individuals requiring other assistance must make their request known 48 hours preceding the meeting by contacting the City Recorder's Office at 503-829-6855

DATE 0**3/14/18**

MOLALLA TRANSPORTATION SYSTEM PLAN UPDATE

CITY COUNCIL (CC) MEETING
#1 Wednesday, MARCH 14, 2018

KITTELSON & ASSOCIATES

Project Overview

- TSP Update Project Overview
- Transportation System Needs
- Transportation System Solutions
- Key Outcomes
- Next Steps

Project Overview

- Project Schedule
  - July 2017: Kick-off
  - August – October: Goals & Objectives/Funding Assumptions
  - October – December: Needs and Deficiencies
  - **December – March: Potential Solutions**
  - March – May: Draft Plan and Financially Constrained Plan
  - May – July: Draft TSP and Implementation Language
  - July – August: Adoption

Project Overview

- Project Coordination and Public Involvement
  - Project Management Team (PMT)
  - Technical Advisory Committee (TAC)
  - Project Advisory Committee (PAC)
  - Community Meeting
  - Virtual (Online) Community Meeting
  - Project Website
  - Interactive Online Project Map

Transportation System Plan Needs

- Public Transit
- Pedestrian
- Bicycle
- Motor Vehicle
- Other
  - Rail
  - Air
  - Water
  - Pipeline

Transportation System Plan Solutions

- Transportation System Management and Operations (TSMO)
- Access Management
- Pedestrian
- Bicycle
- Transit
- Motor Vehicle
  - Street System Connectivity
  - Freight Mobility and Reliability
  - Roadway Capacity

Key Outcomes

- OR 213/Toliver Road
- OR 211/Molalla Avenue
- OR 211 Mathias Road
- Molalla Forest Road
- Pedestrian and Bicycle Solutions
- Pedestrian Crossings

Next Steps

- Upcoming Meetings
  - PAC Meeting #4: May 3, 2018
  - Community Meeting #2: May 10, 2018
  - Virtual Community Meeting #2: May 10, 2018
  - Joint Planning Commission/City Council Work Session #1: May 16, 2018
  - Joint Planning Commission/City Council Work Session #2: July 18, 2018
  - Planning Commission Hearing: August 1, 2018
  - City Council Adoption Hearing: August 22, 2018

KEY OUTCOMES

The following key outcomes are based on information included in Tech Memo 4: Existing Gaps and Deficiencies, Tech Memo 5: Future Needs, and Tech Memo 6: TSP Solutions. These key outcomes represent a sample of the information included in these memos and are intended to provide an understanding of where the project team is in the planning process and where we are headed, in terms of selecting a preferred solution and developing projects for the TSP update.

OR 213/Toliver Road

The OR 213/Toliver Road intersection currently operates at level of service (LOS) F, but below capacity during the weekday PM peak hour. This is primarily due to the relatively high westbound left-turn volume at the shared approach. The intersection is projected to continue to operate at LOS F and above capacity under year 2040 traffic conditions. Preliminary signal warrants indicate that a traffic signal is **NOT** warranted under existing or forecast traffic conditions.

The OR 213/Toliver Road intersection currently experiences a high rate of crashes. A review of the data indicates that several of the crashes were reported as rear-end crashes and involved vehicles along OR 213 waiting to turn left onto Toliver Road while others were reported as turn crashes and involved vehicles turning from OR 213 to Toliver Road or from Toliver Road onto OR 213.

The solutions being considered include:

- Widen OR 213 to provide separate left-turn lanes at the northbound and southbound approaches – this solution is consistent with the current TSP.
- Widen OR 213 to provide a continuous center two-way left-turn lane through the intersection – this solution may require approval of a design exception from ODOT.
- Install a traffic signal when warranted – this solution may require widening as well as approval from the statewide traffic engineer.

OR 211/Molalla Avenue

The OR 211/Molalla Avenue intersection currently operates at LOS F, but below capacity during the weekday PM peak hour. This is primarily due to the relatively high volume of through and left-turn movements at the eastbound and westbound approaches. The intersection is projected to continue to operate at LOS F and above capacity under year 2040 traffic conditions. Preliminary signal warrants indicate that a traffic signal **IS** warranted under forecast traffic conditions.

The OR 211/Molalla Avenue intersection currently experiences a high rate of crashes. However, a review of the data indicates there are no trends or patterns.

The solutions being considered include:

- Install enhanced signs with flashing beacons and pavement markings that “SLOW” traffic at the eastbound and westbound approaches.

- Install a traffic signal when warranted – this solution may require approval from the statewide traffic engineer. In addition to the traffic signal:
    - Install separate left-turn lanes at the eastbound and westbound approaches – this solutions would result in the removal of on-street parking
    - Prohibit left-turns during peak periods – this solution would result in reliance on the local street system and out-of-direction travel. This solution is consistent with the preferred solution identified in the OR 211 Streetscape Plan.

OR 211/Mathias Road

The OR 211/Mathias Road intersection currently operates acceptable and is projected to operate acceptably under year 2040 traffic conditions. However, the intersection currently experiences a high rate of crashes. A review of the data indicates that several of the crashes were reported as turn crashes and involved vehicles turning from OR 211 to Mathias Road.

The solutions being considered include:

- Reduce posted speed limit along OR 211 to 25 mph prior to the intersection.
- Install enhanced signs with flashing beacons and pavement markings that "SLOW" traffic at the westbound approach.
- Widen OR 211 and install a separate left-turn lane at the westbound approach.
- Reconfigure the intersection as a conventional "T" intersection – this improvement is consistent with the current TSP.
- Reconfigure the intersection as a single-lane roundabout – this improvement is consistent with the current TSP.

Molalla Forest Road

The segment of Molalla Forest Road between OR 211 and Molalla Avenue is identified as an arterial in the current TSP. This designation was primarily based on the notion that Molalla Forest Road would become a downtown bypass and a freight route allowing vehicles and trucks to bypass the downtown. However, the improvements identified in the current TSP have not been completed and based on conversations with City staff, the notion of Molalla Forest Road as a bypass is no longer supported. However, there is still a need to provide east-west connectivity south of OR 211.

The solutions being considered include:

- Redesignate Molalla Forest Road as a major collector.
- Reconstruct Molalla Forest Road from OR 211 to Molalla Avenue consistent with the City's standards for a major collector.
- Reconstruct Molalla Forest Road with standards unique to Molalla Forest Road – the standards should be developed through the TSP planning process

- Install a shared-use path on the north side of the roadway from OR 211 to Molalla Avenue – this is consistent with the County's Active Transportation Plan. The shared-use path could also tie into the city's existing shared-use path and trail system.

Pedestrian and Bicycle Solutions

Pedestrian and bicycle facilities are the elements of the transportation system that allow residents to travel by foot or bike to local destinations, such as schools, parks, churches, etc. While these facilities are currently provided along many city streets, there are many more streets where these facilities are needed to improve pedestrian and bicycle access and connectivity. The solutions identified to address needs in the pedestrian and bicycle systems reflect the pedestrian level of traffic stress (PLTS) and bicycle level of traffic stress (BLTS) analysis methodologies and results. Both methodologies tend to favor low speed facilities that provide wide sidewalks or bike lanes that are separated from vehicle traffic. Therefore, the pedestrian and bicycle solutions are generally structured to satisfy the requirements for low stress facilities per the methodologies.

The pedestrian solutions generally include:

- Fill in the gaps on one side of the roadway with new sidewalks of appropriate width by filling in and replacing the open ditches with a culvert drainage system.
- Fill in the gaps on both sides of the roadway with new sidewalks of appropriate width by filling in and replacing the open ditches with a culvert drainage system.
- Remove the existing sidewalk and install new sidewalks of appropriate width along both sides of the roadway.
- Evaluate light levels and install street lighting along the full length of the roadway as necessary.

For lower speed facilities, the bicycle solutions generally include:

- Reduce the posted speed limit to 25 mph and remove the roadway centerline stripe
- Reduce the posted speed limit to 25 mph and install shared lane pavement marking and signs

For higher speed facilities, the bicycle solutions generally include:

- Reduce the posted speed limit to 30 mph and install on-street bike lanes on both sides of the roadway by filling in and replacing the open ditches with a culvert drainage system.
- Reduce the posted speed limit to 35 mph and install buffered bike lanes on both sides of the roadway by filling in and replacing the open ditches with a culvert drainage system.
- Maintain the posted speed limit and install separated bike lanes on one or two sides of the roadway by filling in and replacing the open ditches with a culvert drainage system.
- Maintain the posted speed limit and install a shared-use path on one side of the roadway by filling in and replacing the open ditches with a culvert drainage system.

Pedestrian Crossings

Enhanced pedestrian crossings are currently provided along the city's arterial and collector streets at major intersections and key mid-block crossing locations near essential destinations. Several additional enhanced pedestrian crossings are identified based on a review of the current TSP and other recent relevant planning documents, based on a review of the transportation system, and input from city staff, the advisory committees, and the general public.

The National Cooperative Highway Research Program (NCHRP) Report 562 *Improving Pedestrian Safety at Unsignalized Crossings* provides a methodology for evaluating appropriate levels of crosswalk protection. The methodology considers existing and project future traffic volumes, travel speeds, and pedestrian crossing volumes as well as a number of other factors. Per the methodology, the minimum number of pedestrian crossings needed to support enhanced pedestrian crossing treatments is 20 along facilities posted 35 mph and below and 14 along facilities posted above 35 mph.

Given that pedestrian crossing volumes are generally unknown at a majority of the crossings, the solution assume the minimum number of pedestrian crossings are present and identify appropriate levels of crosswalk protection based on the existing and projected future traffic volumes and the posted speeds.

The solutions generally include

- Curb extensions
- Median refuge islands
- High visibility pavement markings and signs
- Pedestrian-activated beacons
- Pedestrian signals
- ADA accessible curb-ramps with tactile warning strips.

Minutes of the Molalla City Council Meeting
Molalla Adult Center
315 Kennel Ave., Molalla, OR 97038
Wednesday, February 28, 2018

1. **CALL TO ORDER OF THE MOLALLA CITY COUNCIL MEETING;** the meeting of February 28, 2018 was called to order by Mayor Jimmy Thompson at 7:00 P.M.

ATTENDANCE:
Mayor Jimmy Thompson - Present
Councilor Elizabeth Klein - Absent
Councilor Leota Childress – Present
Councilor DeLise Palumbo - Present
Councilor Glen Boreth – Present
Councilor Cindy Dragowsky - Present
Councilor Keith Swigart – Present

STAFF IN ATTENDANCE:
Dan Huff, City Manager - Present
Gerald Fisher, Public Works Director - Present
Chaunee Seifried, Finance Director - Present
Rod Lucich, Police Chief - Absent
Kelly Richardson, City Recorder – Present
Diana Hadley, Library Director - Absent
Chad Jacobs, City Attorney – Absent

2. **COMMUNICATIONS, PRESENTATIONS, and PUBLIC COMMENT**
   a) **Appreciation Award-Presentation for Erin Devlin,** Mayor Thompson thanks Erin for her help with the Vision process. Specifically in regards to the Hispanic Community, she helped bridge the gap in communications and community involvement. Councilor Childress wanted to thank Erin as well for her unending support during the process. Erin herself thanked the City of Molalla for the commitment and involvement in community relations.
   b) **Discussion and/or Action Regarding Application for Library Board,** Steve Rowland the applicant gave a brief summary of his qualifications as a member of The Molalla Historical Society and a retired middle school teacher Rowland felt this gave him a unique perspective.

Councilor Swigart made the motion to approve the application for Steve Rowland and allow Mayor Thompson to appoint him to the Molalla Library Board and Councilor Boreth seconds. Motion carries (6-0), all ayes.

3. **ADOPTION OF THE AGENDA**

Councilor Dragowsky made the motion to approve the presented agenda of February 28, 2018 and Councilor Boreth seconds. Motion carries (6-0), all ayes.

4. **CONSENT AGENDA**
   a) Minutes – February 14, 2018 Regular Meeting Minutes.
   b) Correspondence – Wave Broadband rate increase notification.

Councilor Childress made a motion to approve the consent agenda as presented and Councilor Boreth seconds. Motion carries (6-0) all ayes.

5. **ORDINANCES, RESOLUTION AND PROCLAMATIONS**
    a) **N/A**
6. **NEW BUSINESS**
    a) **Discussion and/or Action Regarding Various Sections of the Molalla Municipal Code,** City Recorder, Kelly Richardson and City Manager, Dan Huff present to council a few items that will be brought back to them at a later date for council review as follows,
        - **Business License Late fee** should be removed from the code and be set by Resolution.
        - **Utility Billing Late Fee** should be removed from the code and be set by Resolution.
        - **Planning Commission Criteria** should be moved to chapter 2 to be in line with the rest of the code.
        - **Fix-It Ticket Program,** review process with all of the stakeholders to make sure it is being administered and fees are appropriate to achieve compliance as intended.

    Following the presentation by CR Richardson council had questions and concerns regarding fee amounts and directed Richardson to have something put together prior to the meeting so council had time to review.

7. **OLD BUSINESS**
8. **Discussion and/or Action on Street Maintenance.** There was no discussion.

9. **REPORTS AND ANNOUNCEMENTS**
    a) **City Manager** Gives a brief overview/update ongoing project**.** Listed below are a few examples.
        - 18/19 Budget
        - Audit
        - Website Update
        - *Transportation Master Plan Update*
        - *Wastewater Master Plan Update*
        - Records Management
        - Various Public Works Projects
        - Utility Billing Project
        - Highway 211 Project

- **Goal Setting**

Staff,

- PWD Fisher informs Council he is working on the upcoming budget.
- FD Seifried had nothing at this time.
- CR Richardson nothing more.

b) Councilors

- **Councilor Childress** liked the dollar bill breakdown that staff had presented. In addition, the Molalla Chamber of Commerce Manager has stepped down and currently 30 applications have been submitted.
- **Councilor Dragowsky** reiterated the importance of attending the budgeting 101 class and thanks the community for the $82,000 dollars raised for the four families in the share the love event.
- **Councilor Boreth** thanks Erin Devlin and welcomes Steve Rowland.
- **Councilor Swigart,** thought if staff had a way to inform the public how the System Development Charges were administered it would correct the myth that SDC's can pay for everything.

c) Mayor, Thompson had nothing at this time.

10. EXECUTIVE SESSION, Mayor Thompson reads into the record**,**

Pursuant to ORS to Oregon Public Record Law, ORS 192.660(2):

(a) To consider the employment of a public officer, employee, staff member or individual agent.

(b) To consider the dismissal or disciplining of, or to hear complaints or charges brought against, a public officer, employee, staff member or individual agent who does not request an open hearing.

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(e) To conduct deliberations with persons designated by the governing body to negotiate real property transactions.

(f) To consider information or records that are exempt by law from public inspection.

(g) To consider preliminary negotiations involving matters of trade or commerce in which the governing body is in competition with governing bodies in other states or nations.

(h) To consult with counsel concerning the legal rights and duties of a public body with regard to current litigation or litigation likely to be filed.

(i) To review and evaluate the employment-related performance of the chief executive officer of any public body, a public officer, employee or staff member who does not request an open hearing.

Motion to adjourn regular session and enter into executive session made by Councilor Boreth and Councilor Dragowsky seconds. Motion carried (6-0), all ayes at 7:50 pm. Councilors present Thompson, Boreth, Swigart, Childress, Palumbo and Dragowsky.

Also in attendance were staff members City Manager, Dan Huff, Public Works Director Gerald Fisher and City Recorder, Kelly Richardson.

Council had a general discussion with City Manager, Huff regarding pursuant to ORS 192.660(2) (e) and (h) as listed above and At approximately 8:43 PM, Mayor Thompson moves to adjourn the executive session Councilor Childress seconds. Motion carries 6-0 all ayes.

11. ADJOURN

Motion to adjourn regular session made by Councilor Boreth and Councilor Dragowsky seconds. Motion carried (6-0), all ayes at 7:50 pm.

_____ _____

Mayor, Jimmy Thompson Date

ATTEST: _____

Kelly Richardson, CMC
City Recorder

City Of Molalla

City Council Meeting

Agenda Category: New Business

Subject: TMDL Implementation Plan

Recommendation: No Action Required.

Date of Meeting to be Presented: March 14, 2018

Fiscal Impact: None

Background:

Included in the packet are copies of the Fifth Year Review and 2015-2020 TMDL Implementation Plan. Each year the City submits a TMDL report to DEQ related to stormwater activities. Every five years agencies must submit a summary report looking back five years and the program going forward for the next five years. The draft Fifth Year Review was submitted to DEQ on December 12, 2017 and the 2015-2020 TMDL Implementation Plan was submitted to DEQ on February 26, 2018.

SUBMITTED BY: Gerald Fisher, Public Works Director
APPROVED BY: Dan Huff, City Manager

TMDL Implementation 5th Year Review Report Guidance Template
Molalla-Pudding Subbasin Designated Management Agencies
Due January 31, 2016
Version I

I. Instructions

By completing this 5th Year Review Report, you are fulfilling the reporting requirement and providing DEQ with a summary of your overall TMDL implementation status, including assessment of the relevance of best management practices used for meeting TMDL pollution reductions. This form is brief and is intended to provide a quick look at TMDL implementation progress. Please attach a separate document if you determine that additional information, beyond this form, is needed to capture TMDL implementation progress.

II. Submittal

Please submit an electronic copy of the completed 5th Year Review Report to the appropriate Basin Coordinator (listed below). Name the submitted, electronic file with the city name and the date. Include a separate, scanned cover sheet which has been signed by the person who is authorized to sign this report. If you have further questions about submittal or need assistance, please contact the DEQ Basin Coordinator for your geographic area:

- **Molalla** Karen Williams 503-229-6957 williams.karen@deq.state.or.us
  DEQ Northwest Region
  700 NE Multnomah St., Suite #600
  Portland, OR 97232
  Click Here to Submit Form to Karen Williams
- **Pudding** Nancy Gramlich 503-378-5073 gramlich.nancy@deq.state.or.us
  Priscilla Woolverton 541-687-7347 woolverton.priscilla@deq.state.or.us
  DEQ Western Region
  4026 Fairview Industrial Dr SE
  Salem, OR 97302
  Click Here to Submit Form to Nancy Gramlich

III. Water Quality Tips

Sidebars throughout this form provide information about nonpoint source pollution and best management practices. Please take time to review all the Water Quality Tips!!!

IV. Summary Report Availability

DEQ will use data and information from the Molalla-Pudding Subbasin 5th Year Review Reports to evaluate the overall progress of urban Designated Management Agencies in implementing practices that will reduce non-point source pollutant loads. A final report summarizing the information will be prepared for all DMAs in the Molalla-Pudding Subbasin. The report will not evaluate or establish compliance with permits or TMDL orders.

V. Please provide the information requested below:

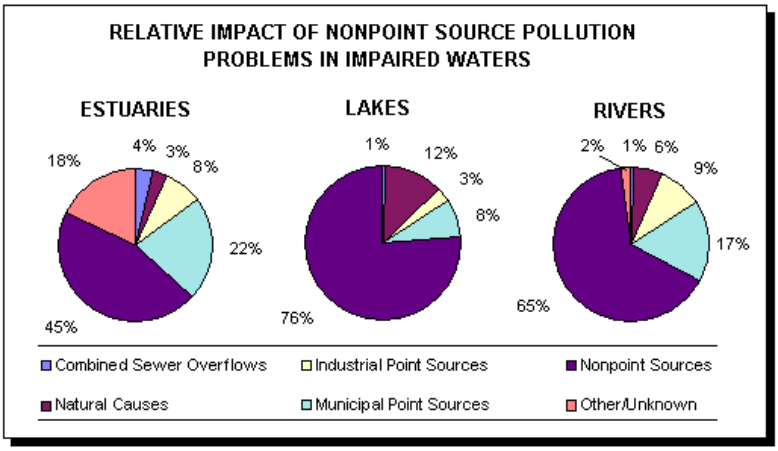
1. TMDL Contact information

TMDL Contact Name Gerald Fisher
Title Public Works Director
Address 117 N. Molalla Ave. / PO Box 248
City / County Molalla / Clackamas Zip Code 97038
Telephone 503-829-6855
Email address gfisher@cityofmolalla.com

Water Quality Tip #1
TMDL Nonpoint Source Plan Implementation is Important for Restoring and Protecting Water Quality

Identify Your Plan With A More Common Name:

- **Water Quality Improvement Plan**
- **Nonpoint Source Implementation Plan**
- **Stormwater Management and Temperature Improvement Plan**
- **Surface Water Management Plan**



Source:http://www.na.fs.fed.us/spfo/pubs/n_resource/riparianforests/Tab%201.htm

2. TMDL Geographic and Demographic Information

TMDL Implementation Plan Approval Date **(MM/DD/YY)**: 12/2011

Designated Management Agency Name DEQ NW Region - Karen Williams

TMDL Basin - **Willamette River**

Please identify your subbasin (s) ☐ Middle Willamette ■ Molalla ■ Pudding

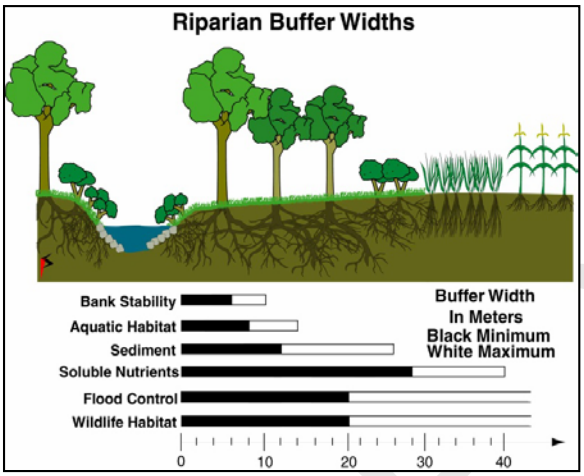
List streams and receiving waterbody(s) within your jurisdiction:

Bear Creek
Creamery Creek

a. Please Identify Your Population or Permit Status

☐ < 500	☐ >=10,000 Stormwater Six Control Measures
☐ 500 < 1000	☐ City NPDES MS4 Phase II Permit
☐ 1,000 < 5000	☐ County NPDES MS4 Phase II Permit
☒ 5,000 < 10,000	☐ City NPDES MS4 Phase I Permit

Water Quality Tip #2



Recommended Riparian Management Practices

- **Protect or establish native shrubs, trees, or other vegetation along streams to help prevent bank erosion, trap sediment and filter other pollutants.**
- **Plan developments and other land disturbing activities to protect riparian zones.**

Practices to Avoid

- **Straightening sections of streams.**
- **Removing streamside shrubs, trees and other vegetation.**
- **Operating heavy equipment in the riparian zone.**

Comparative widths of riparian buffer needed for certain conservation goals.
Illustration by: Peter Schulz
Source:http://www.buffer.forestry.iastate.edu/Photogallery/illustrations/Images/Riparian-Widths.sld.jpg

b. Please Identify the Urban/Rural TMDL Reductions Your Plan Addresses Using Table A below:

Table A – TMDL Parameter Load Allocations

Subbasin	Parameter Reductions
Middle Willamette **Molalla-Pudding**	**Mercury:** ☐ 27% Reduction Willamette Basinwide-All Subbasins **Temperature:** ■ Attainment and preservation of effective shade levels on smaller tributaries associated with system potential vegetation will eliminate most anthropogenic nonpoint source heat loads. Surrogate measure is percent effective shade targets and a heat load equivalent of 0.05 ºC of the Human Use Allowance. Other important measures— preserving and restoring cool water refuges where salmonids rear and migrate to when the river warms up in the summer; restore instream flow quantity.
Middle Willamette	**Bacteria Reductions:** ☐ 88% summer ☐ 75% fall-winter-spring Middle Willamette Specific Tributaries ☐ 81% Mill Creek Turner Road ☐ 79% Pringle Creek at Pringle Park/Church Street ☐ 89% Clark Creek at Mouth Bush Park
Molalla-Pudding	**Bacteria:** ■ 75% to 87% reduction summer ■ 70% to 92% reduction fall-winter-spring
Pudding	**Iron:** ☐ 6 mg/l total suspended target to meet 7% to 79% reduction based on stream flow Pudding River. **Legacy** **Pesticides:** ☐ 30% reduction DDT Pudding River and Tributaries ☐ 90% reduction Dieldrin Pudding River and Tributaries ☐ 15 mg/L Pudding River In stream total suspended solids targets

VI. TMDL Annual Reporting and Implementation Information

1. Were the required annual reports submitted over the last 4-5 years?

Report 1 ☐ Yes ☑ No **Report 2** ☐ Yes ☑ No **Report 3** ☑ Yes ☐ No **Report 4** ☑ Yes ☐ No

2. Please refer to Appendix A of this document. Review Appendix A and check the boxes for Appendix A strategies that have been ongoing, implemented, or partially implemented over the preceding four years. Compare Appendix A to your matrix. Update your matrix with any strategies that are checked in Appendix A, and not in your matrix, before proceeding to number 4 below.

3. Top 8 Management Strategies
Table B on the next page identifies 8 TMDL management strategies that should be incorporated into every plan over time.

a. Please check the Table B 2010-2015 column for the strategies that were implemented during that time cycle.

b. Please check Table B 2015-2020 column for the strategies that will be implemented in this next cycle.

c. Compare Table B to your matrix. Update your matrix with any strategies that are checked in either column, and not in your matrix, before proceeding to number 4 below.

Table B- TMDL Top 8 Management Strategies

#	Management Strategy	2010 - 2015	2015 - 2020
1	City Council meeting overview and acknowledgement of all TMDL plans and annual and 5 year reports	☑	☑
2	Based on the fiscal analysis required for plan approval, confirmed funding strategy is in place for progressive plan implementation	☐	☑
3	Stormwater conveyance systems map to track and locate problems more efficiently	☑	☑
4	Illicit discharge ordinance for such things as releases, spills, erosion, dumping	☑	☑
5	Development and implementation of post-construction ordinance for meeting pre-development hydrology*	☑	☑
6	Inventory of riparian vegetation within city or county jurisdiction to establish baseline conditions and priorities for restoration	☐	☐
7	Complete at least one riparian restoration project or implement strategy to preserve existing riparian vegetation	☐	☐
8	Establish a mailing or email list of landowners to conduct education and outreach and public involvement strategies	☐	☐

***Note:** Please access the *Guidance for Including Post-Construction Elements in TMDL Implementation Plans* http://www.deq.state.or.us/wq/tmdls/docs/TMDLguidance.pdf

4. Matrix Update and Numerical Categorization

a. Please update your revised matrix by entering the "Strategy Matrix Term" below that best describes the status of each strategy listed in your matrix. Use only the terms provided below. Every strategy must have an identified term (refer to Appendix B example).

b. Please refer to your matrix developed from number 4.a. above, and numerically categorize the strategies below.

Strategy Matrix Terms

13	**Complete -**	Strategy implemented and/or is ongoing as expected.
9	**Incomplete -**	Strategy started, but measures not 100% or interim steps still underway because of unanticipated delays.
0	**Not Implemented -**	Strategy not started but will be implemented 2015-2020.
3	**Delete -**	Strategy not implemented and will not be implemented in 2015-2020.
7	**Appendix A -**	Strategy implemented and added from Appendix A review.
3	**Table B -**	Strategy implemented in 2010-2015 and added from Table B Review.
0	**Table B New -**	Strategy from Table B review that will be implemented 2015-2020.

c. Please save and rename your matrix as 2015-2020, and email or mail a copy to your respective DEQ representative at the time of template submittal.

Note for Section VI: ***DMAs must demonstrate plan implementation and efforts to reduce TMDL pollutants. DEQ will not use timelines and measures in implementation plans as enforceable compliance points as these measures are based on a DMA's professional judgment of their capability. DEQ expects that delays in timelines and not meeting 100% of the measures will be part of the DMA's adaptive management.***

5. Please provide a concise discussion on the successful plan elements implemented during 2010-2015. Please limit your discussion to ten sentences or less.

A city ordinance was updated during the 2010-2015 period to promote the use of low impact development and preservation of existing riparian areas. Riparian buffers have been established for new developments near Bear and Creamery Creeks. The ordinance also requires all construction projects within the City to have an erosion control plan in place. The City employees a full time planner to oversee and enforce the riparian aspects of the ordinance.

The City has initiated public outreach to promote water conservation to help lower the City's required municipal water diversion. Informative water conservation flyers were mailed out in water bills and handed out during the City's annual 4th of July parade and National Night Out.

The City maintains and operates a wastewater treatment plant effluent temperature monitoring station to help in maintaining low effluent discharge temperatures to the Molalla River.

The City continued a street sweeping program through the 2010-2015 period and estimates that 6-7 cubic yards of debris was removed from the City streets each week.

6. Please provide a concise discussion on any impediments to 2010-2015 plan implementation. Please limit your discussion to ten sentences or less.

Budget limitations and staff turnover have prevented a number of original matrix strategies from being implemented. The City was unable to obtain grant funding to complete the planned Bear Creek Greenway project and other stormwater treatment projects. Limited funding has also hindered the ability to create public outreach programs, outside of the water conservation efforts. The City has not had the resources to provide public education on landscape design and maintenance. Staff turnover has hampered the City's ability to create working relationships with local watershed groups in order to initiate riparian improvement projects.

The City has not had the resources to initiate projects to reduce illicit discharge and infiltration issues. However, with the completion of the Wastewater Facilities and Collection System Master Plan that is currently being developed, the City will begin a cross connection and infiltration and inflow program during the next 5-year period.

The City has a stormwater master plan that is outdated and has slowed the progress on major stormwater system upgrades. The Stormwater Master Plan will be updated during the next 5-year period and recommend stormwater upgrades will be budgeted for.

7. Effectiveness of Public Participation/Involvement and Public Education and Outreach

Educating and engaging staff and other stakeholders is a requirement of TMDL Implementation. In order to successfully design and implement a sustainable TMDL Implementation Plan for stormwater protection and cool water for aquatic life, implementing agencies need support from internal and external stakeholders including: staff, other agencies, elected officials, civil society, and the public at large. **For the strategies in Table C below, please identify the approximate number of times your city or county has effectively reached, engaged, gained support, and encouraged changes in behavior in your community.**

Table C – Water Quality Outreach, Education, and Public Involvement Strategies

Strategy Type	Total Times Strategy Used
Example - City Council Meeting -TMDL related agenda item (reporting, plan status)	6
Example – Consumer Confidence Report(CCR) Water Quality Education Corner	1
City Council Meeting with TMDL in Subject	0
Workshop and Training	0
Annual City Cleanup Day	5
Tree Committee Meetings	0
City Development and Planning Committee Meetings	2
Consumer Confidence Report w/Water Quality Corner	0
Brochure, Utility Bill Insert, City Newsletter	0
Media Release (Newspaper, Radio, Television, Cable Access Channel)	0
Website Utilized for Posting and Storing Water Quality Documents	2
Water Quality Complaint Resolution	0
Other:	
Other:	
Other:	
Other:	
Other:	
Other:	
Other:	

VII. TMDL Implementation and Reporting Information

1. For the next cycle (2015-2020) of TMDL implementation, please provide a concise discussion on continued, effective implementation and proposed solutions to overcome previous impediments. Please limit your discussion to 15 sentences or less.

The City of Molalla will continue to work to achieve the strategy goals of the ongoing implementation strategies. Items that have been incorporated as day to day activities (i.e., stormwater maintenance, plan review and enforcement of city ordinance) will be on-going.

A more comprehensive TMDL implementation Plan will be completed and submitted to DEQ in early 2018. City staff will coordinate and work with the City Council to make them aware of the need to work towards accomplishing the implementation goals of the new Plan.

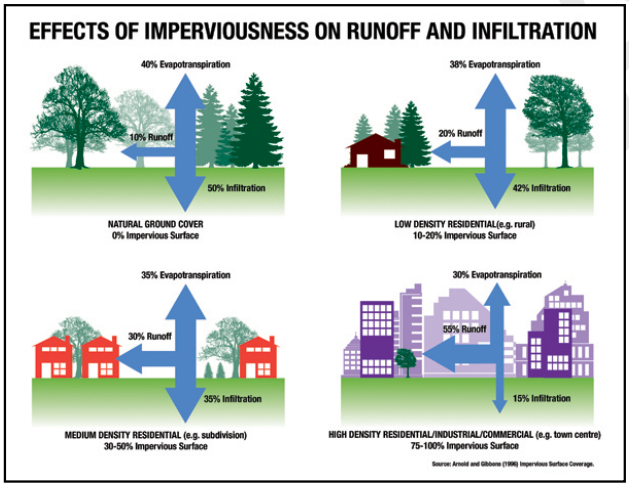
The City will use the new Wastewater Facilities and Collection System Master Plan as a guide to correcting cross-contamination and infiltration and inflow issues. The City will begin planning for an update of the stormwater master plan and use the plan as a tool to upgrading the existing stormwater system.

Development plan reviews will incorporate the newly adopted development code, which recommends low impact development and requires developments to meet pre-development hydrology conditions and the protection of riparian areas.

2. The 5th year submittal date by DEQ does not delay or change your 2010-2015 assigned annual progress reporting month. The annual reports for 2015-2020 TMDL implementation cycle will continue to be submitted in:

☒ January ☐ June ☐ August ☐ September ☐ October ☐ November ☐ Other_____

Water Quality Tip #3
Post-construction Ordinance for Meeting Pre-development Hydrology



Source: Town of Richmond Hill, CA - Environment Services Division, Stormwater Management

Stormwater Management

- Releases runoff into natural waterways slowly, imitating the water cycle before urbanization.
- Involves storing and directing stormwater runoff in urbanized areas to control flooding, erosion and water quality
- Slows the force of water during rain events and mitigates scours of stream bottoms, erosion of banks, impacts to aquatic habitat, and increases in pollutants such as phosphorus, heavy metals, sediment, oil and grease, pesticides and bacteria from urbanized areas.

VIII. Certification

The person certifying the report should be a principal executive officer (e.g., Public Works Director, City Administrator) or ranking elected official (e.g., Mayor)

Name of certifying official: Gerald Fisher

Title: Public Works Director

■ **Yes I certify that the information contained in this document is true, accurate, and complete to the best of my knowledge and belief.**

Date: 12/08/2017

(mm/dd/yyyy)

Please remember to:

- ***Complete Appendix A checklist and Table B***
- ***Email or mail to the DEQ Basin Coordinator for your geographic area the new 2015-2020 matrix that will be used for reporting annual and 5 year progress for the next 5 year cycle of TMDL implementation.***

Water Quality Tip #4

Mowed **First Year Growth** **5 to 10 Years**

Changing maintenance practices, such as adding "no-mow" buffers, and restoring natural vegetation along waterways can begin the process of healing our urban streams and providing a greenbelt network for wildlife and future generations. Source: http://www/austintexas.gov/sites/default/files/files/Watershed/riparian/riparian_progression2.jpg

2010-2015 Matrix Implementation	Appendix A Key Strategies for TMDL Implementation	Bacteria(E coli)	Dissolved Oxygen	Turbidity	Iron	Mercury	Legacy & Current Use Pesticides	Nutrients Phosphorous; Nitrates	Temperature
	Temperature Reduction Strategies **Riparian and Wetland Protection and Restoration Programs**								
☑	Tree protection ordinance that retains canopy coverage, which will hold water and reduce temperature increases on impervious surfaces								•
☑	Wetland protection ordinance that includes protection of headwaters and riparian corridors and other groundwater resources that provides cool water inflow from groundwater, hyporheic (near surface), wetland, or other sources during the hottest time of year	•	•	•	•	•	•	•	•
☐	Low Impact Development (LID) ordinance that requires all new, redevelopment, and	•	•	•	•	•	•	•	•

2010-2015 Matrix Implementation	Appendix A Key Strategies for TMDL Implementation	Bacteria(E coli)	Dissolved Oxygen	Turbidity	Iron	Mercury	Legacy & Current Use Pesticides	Nutrients Phosphorous; Nitrates	Temperature
	retrofit projects to retain natural riparian site conditions for surface water flows								
☑	City/County exclusive requirement to protect buffers, riparian, wetland, and native vegetation areas on city/county property (ex., conservation programs, buffer width requirement)	•	•	•	•	•	•	•	•
☐	Instream placement of large woody debris, and bed and bank material (e.g. gravel)								•
☐	Educate or enforce on riparian violations	•	•	•	•	•	•	•	•
☑	Identification of watershed partners and projects that support implementation efforts and implementation of riparian restoration and LID on-the-ground projects	•	•	•	•	•	•	•	•
☐	Purchase or adoption of permanent instream transfers through Oregon		•						•

2010-2015 Matrix Implementation	Appendix A Key Strategies for TMDL Implementation	Bacteria(E coli)	Dissolved Oxygen	Turbidity	Iron	Mercury	Legacy & Current Use Pesticides	Nutrients Phosphorous; Nitrates	Temperature
	Water Resources Department, particularly during the summer and late fall flow periods.								
	Stormwater Management Strategies **Pollution Prevention in Municipal Operation**								
☑	Regular sweeping of streets, parking lots, and other impervious surfaces with sweepers that have good efficiencies for removing the tiniest particles.	•		•	•	•	•	•	
☐	Implement policy, such as integrated pest management(IPM), to prevent over-application of maintenance and construction products (ex., reduce fertilizer use at public parks, on public lawns, landscaped areas, riparian corridors; avoid over application deicing salts)		•	•		•		•	

2010-2015 Matrix Implementation	Appendix A Key Strategies for TMDL Implementation	Bacteria(E coli)	Dissolved Oxygen	Turbidity	Iron	Mercury	Legacy & Current Use Pesticides	Nutrients Phosphorous; Nitrates	Temperature
☐	Employee training about maintenance and construction practices to protect water quality	•	•	•	•	•	•	•	•
☑	Maintenance program for stormwater collection and treatment systems	•		•	•	•	•	•	
☐	Incorporate electric and low MPG into transportation fleet to reduce mercury					•			
	Stormwater Management Strategies **Illicit Discharge Detection and Elimination**								
☐	No Wildlife Feeding ordinance or signs near waterbodies to limit wildlife waste and sediment from riparian damage entering waters of the state	•		•	•	•	•	•	

2010-2015 Matrix Implementation	Appendix A Key Strategies for TMDL Implementation	Bacteria(E coli)	Dissolved Oxygen	Turbidity	Iron	Mercury	Legacy & Current Use Pesticides	Nutrients Phosphorous; Nitrates	Temperature
☑	Pet waste reduction strategies (e.g., waste pick-up stations or ordinance for home and in public areas; dog park that is sited away from environmentally sensitive features; signs; collaborative Pledge based pet waste program)	•						•	
☑	Porta potties at parks in summer with no facilities and public events (fairs, markets, holidays, etc)	•						•	
☑	Minimize inflow and infiltration of stormwater to wastewater system	•						•	
☑	Respond to complaints about illegal discharges; educate residents about illegal discharges.	•	•	•	•	•	•	•	
☑	Septic system programs (e.g., ordinance for hook-up to public wastewater system; local loan program for low-cost assistance; onsite system fixes and repairs during sale)	•						•	

2010-2015 Matrix Implementation	Appendix A Key Strategies for TMDL Implementation	Bacteria(E coli)	Dissolved Oxygen	Turbidity	Iron	Mercury	Legacy & Current Use Pesticides	Nutrients Phosphorous; Nitrates	Temperature
☐	Identify and eliminate wastewater treatment plant illicit discharges and cross connections to stormwater system	•	•			•		•	•
	Stormwater Management Strategies **Construction Stormwater Runoff Control**								
☑	Hillside development (Steep Slopes) protection code/ordinance to minimize or stop soil erosion from steep slopes that are eroding (or subject to erosion from disturbance)			•	•	•	•	•	
☑	Develop erosion and sediment control ordinance for less than 1 acre of disturbance during construction or adopt 1200 C permit requirements			•	•	•	•	•	
☑	Strengthen 1200-C permit oversight for construction greater than or equal to 1			•	•	•	•	•	

2010-2015 Matrix Implementation	Appendix A Key Strategies for TMDL Implementation	Bacteria(E coli)	Dissolved Oxygen	Turbidity	Iron	Mercury	Legacy & Current Use Pesticides	Nutrients Phosphorous; Nitrates	Temperature
	acre--Require permit approval for land use approval								
	Stormwater Management Strategies **Post-Construction Development for New Development and Redevelopment**								
☑	Construct site swales that will settle, infiltrate , and treat turbid runoff stormwater	•		•	•	•	•	•	
☑	Stormwater Master/Management Plan with water quality components for riparian areas and stormwater management controls (develop or update)	•	•	•	•	•	•	•	•
☐	Adopt a LID ordinance that requires all new, redevelopment, and retrofit projects to reduce impervious surfaces and use LID and other BMPs to infiltrate, filter, retain,	•		•	•	•	•	•	

2010-2015 Matrix Implementation	Appendix A Key Strategies for TMDL Implementation	Bacteria(E coli)	Dissolved Oxygen	Turbidity	Iron	Mercury	Legacy & Current Use Pesticides	Nutrients Phosphorous; Nitrates	Temperature
	evaporate, and slow down runoff close to its source and treat nutrients from impervious surfaces.								
☑	Establish system development code fee and/or maintenance fee for stormwater systems such as bioswales	•	•	•	•	•	•	•	
☐	Implementing the 6 stormwater control measures required for cities >=10K population or MS4 permitted implementing 6 measures outside county MS4 boundaries.	•	•	•	•	•	•	•	
	Stormwater Management Strategies **Education and Outreach, Public Involvement/Participation**								
☐	Stormwater/water quality protection education via website, workshops, mailers, etc	•	•	•	•	•	•	•	

2010-2015 Matrix Implementation	Appendix A Key Strategies for TMDL Implementation	Bacteria(E coli)	Dissolved Oxygen	Turbidity	Iron	Mercury	Legacy & Current Use Pesticides	Nutrients Phosphorous; Nitrates	Temperature
☐	Consult with larger jurisdictions or neighboring cities for educational materials	•	•	•	•	•	•	•	•
☑	Conduct public education and outreach on riparian and wetland protection and restoration and local zoning/ordinances to protect riparian areas	•	•	•	•	•	•	•	•
☑	Establish tree planting program and tree planting in open areas to provide canopy coverage and storm water collection	•	•	•	•	•	•	•	•
☐	Conduct and participate in regional erosion control summits			•	•	•	•	•	
☑	Promote carpooling, public transportation as a strategy to reduce mercury					•			
☑	Promote/collaborate/incentivize riparian protection on private property	•	•	•	•	•	•	•	•
☐	Post TMDL Implementation Plan on website or make available to public for	•	•	•	•	•	•	•	•

2010-2015 Matrix Implementation	**Appendix A** **Key Strategies for TMDL Implementation**	**Bacteria(E coli)**	**Dissolved Oxygen**	**Turbidity**	**Iron**	**Mercury**	**Legacy & Current Use Pesticides**	**Nutrients Phosphorous; Nitrates**	**Temperature**
	review and comment								
	Drinking Water Protection								
☐	Code/Ordinance to provide and protect drinking water obtained from groundwater or surface water sources from nonpoint source protection	•		•	•		•	•	
	List Strategies Being Implemented that are not Identified Above								
☐	Other:	☐	☐	☐	☐	☐	☐	☐	☐
☐	Other:	☐	☐	☐	☐	☐	☐	☐	☐
☐	Other:	☐	☐	☐	☐	☐	☐	☐	☐
☐	Other:	☐	☐	☐	☐	☐	☐	☐	☐
☐	Other:	☐	☐	☐	☐	☐	☐	☐	☐
☐	Other:	☐	☐	☐	☐	☐	☐	☐	☐

Appendix B: TMDL Implementation Matrix Example for Terms

Pollutant: **Bacteria, Mercury, Pesticides, Temperature**

SOURCE	STRATEGY	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS
Pollutants carried to waterways in stormwater	Long term planning for stormwater control	Develop stormwater master plan that incorporates protecting water quality	Council approval needed to fund contractor	-Obtain Council approval for funds -Hire contractor -Plan approval by Council	Start 2009 Complete 2012	Contractor hired	**Delayed** Oct. 2009 Council fund approval Feb. 2010 Contractor selected May 2011 Stormwater master plan developed - City Council review delayed, but expected in next several months 2013 The stormwater master plan can be viewed at www.pwswplan
Pollutants carried to waterways in stormwater	Pollution prevention in municipal	Street Sweeping 2 times per year	Funded	-Sweep streets 2 times/yr -Track volume of debris collected -Before after reduction in volume of debris	Ongoing	NA	**Complete** Over the course of 4 years: Swept streets at a minimum 2 times per year; Documented 1000 pounds of debris reduction. Maintenance log with total debris collected and reduction overtime attached for reference.

Pollutant: **Bacteria**

SOURCE	STRATEGY	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS
Failing Septic System	Ensure Repair of Failing Septic System	Respond to reports of failing systems, work with homeowner to est. timeline for repair	Already funded	Track # of reports, document inspection outcomes, and repairs	Ongoing	NA	**Complete** Over the course of 4 years, received 5 complaints regarding failing septic systems. 2 of 3 resulted in notification for fixes. One was fixed at time of sale and one was a large system referred to DEQ for oversight.
Bacteria carried to waterways in stormwater	Encourage residents to pick up after their dogs in parks	Install pick up after pet stations and bags at 3 parks	Apply for grant	3 Stations installed; Bags checked and replaced	2008-2012 Then ongoing	Obtain grant	**Complete** Please refer to attached photos of park with station. 2009 Grant obtained; 2009 Two stations installed; 2010 One station installed; 2009-ongoing w/ bag inventory check and replacement 3 times per year .
Bacteria carried to waterways in stormwater	Conduct annual cross connection surveys and issue repairs	Conduct 4 cross connection surveys per/year and issue repairs for problems if identified	Part of Wastewater Treatment Plant Operation and Maintenance	Track number of : surveys conducted; repairs issued; repairs performed completed	2008-2013	Conduct Surveys	**Incomplete** 10 surveys(goal 16); 4 work orders issued, 2 completed to eliminate cross connections; 2 repairs pending but in-progress
Pollutants carried to waterways in stormwater	Community development project opportunities	Consider water quality for community development projects	Community development grant	Install dog park/run in river park at protective distance from riparian area	2011	NA	**Appendix A**

Appendix A:

Key Strategies for TMDL Implementation: Other

Other
Other
Other
Other
Other
Other

TMDL Implementation Matrix - Bacteria

POLLUTANT: Bacteria, Mercury, and Legacy Pesticides				**City of Molalla: TMDL Implementation Tracking Matrix**			
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 from this source?*	**HOW** *Specifically, how will this be done?*	**FISCAL ANALYSIS** *What is the expected resource need? Are there existing resources budgeted? If not, where will the resources come from?*	**MEASURE** *How will you quantitatively or qualitatively demonstrate successful implementation or completion of this strategy?*	**TIMELINE** *When do you expect it to be completed?*	**MILESTONE** *What intermediate goals do you expect to achieve, and by when, to know progress is being made?*	**STATUS** *Include summary and date.*
Stormwater	Promote Low Impact Development and on-site stormwater treatment	Encourage green street standards – at least half street improvements with new development Ordinance for meeting pre-development hydrology	Currently in Public Works budget	Percent of green street standards for each project For each project, stormwater quantity calculations to meet pre-development hydrology	Dec. 2012	All new development plans incorporate green street standards and pre-development hydrology	***Complete.*** *City has revised the development code with help of DLCD. Expected adoption date: October 2017. 09/06/17 posted updated Standard Specifications for Public Works Construction. Storm section enhanced to include water quantity/quality design standards including filtration, infiltration, ponds, wetlands, compost filters, and other treatment facilities.*
Stormwater	Promote Low Impact Development and on-site stormwater treatment	Explore waiving system development charges for LID features	Planning staff member, full time	Dollars waived for SDC's concurrent with LID projects.	June 2012	Report criteria in annual report to DEQ, report dollars waived on-going	***Delete.*** *In conflict with municipal code for SDC's and funding of master planned projects.*

TMDL Implementation Matrix - Bacteria

Stormwater	Promote Low Impact Development and on-site stormwater treatment	Incorporate stormwater treatment with transportation projects: e.g. Hwy 211, Molalla Forest Rd., Streetscape Plan	Included in city budget according to capital improvement plan Apply for grants and loans, as necessary	Number of stormwater treatment features installed and volume stormwater treated Grants earned.	Dec. 2013	Submit 319 grant application November 2011	***Incomplete.*** *Completed Kennel Avenue Improvements in 2013. No additional grant funding secured for projects. Stormwater treatment included in CDBG project.*
Stormwater	Promote Low Impact Development and on-site stormwater treatment	Encourage use of drainage swales that settle, infiltrate, and treat turbid runoff. Current Public Works Design Standards provides design specifications for drainage swales.	Currently in City planning budget for plan review	Track number of projects that incorporate drainage swales.	On-going	Add drainage swales to GIS Stormwater map by end of 2020.	***Appendix A***
Stormwater	Reduce pet waste in stormwater runoff	Install waste bags in parks and common dog-walking locations and Citizen education about improper pet waste management	Currently in Parks budget	Number of citizen complaints Track refill need at bag holders	On-going	Report complaint number and bag use in annual report to DEQ	***Complete.*** *Mutt Mitt dispensers were installed in Sheets Field Park, Pocket Park, Basketball Park, Clark Park, Fox Park, Ivor Davies Park, and Long Park. The city has a stock of 4000 bags and continually replenished the sites throughout the year.*

TMDL Implementation Matrix - Bacteria

Stormwater	Educate developers and the public about stormwater and hydrology in the City of Molalla	Complete hydrologic map to represent stormwater drainage, outfalls, streams, wetlands, floodplains, etc.	Currently in Public Works budget	Track map use in presentations, meetings, front office inquiries	Hire GIS tech by December 2011	Map complete June 2012	***Complete.*** *GIS Analyst employed. Stormwater mapping and GPS location of all main lines, manholes, and catch basins completed.*
Stormwater	Educate developers and the public about stormwater and hydrology in the City of Molalla	Make Stormwater Master Plan available to public via City website.	None	Not Applicable	Complete	2003 Stormwater Master Plan is available on the City of Molalla website.	***Appendix A***
Stormwater	Prevent erosion from construction sites	Conduct inspections to address erosion control on sites <1 acre; enforce grading permits	Currently in Public Works budget	Percent of sites that comply voluntarily	On-going	All development meet erosion control requirements	***Complete.*** *All projects within the City limits are required to have an erosion control plan and comply with DEQ 1200C requirements. Recent standard updates strengthened erosion control requirement from 1996 standards.*
Stormwater	Prevent erosion from construction sites	Cooperate with Clackamas County WES to enforce erosion control through 1200C permits	Currently in Public Works budget	Keep track of 1200C permits within City boundaries	On-going	Report number of 1200C permits in annual report to DEQ.	***Complete.*** *Public Works Inspector position filled in 2016.*

Stormwater	Reduce runoff and sediment load from impervious areas: roads, vacant lots	Coordinate with planning department to include water quality improvements with implementation of Urban Renewal Plan – Enterprise Zone	Currently in Public Works budget	City Council acknowledgement	On-going	Present plan to incorporate water quality planning with Urban Renewal to City Council in February 2012	***Complete.*** *09/06/17 posted updated Standard Specifications for Public Works Construction. Erosion control included within each section of the standards and new section regarding Preservation, Restoration, and Cleanup added.*
Stormwater	Reduce runoff and sediment load from impervious areas: roads, vacant lots	Maintain weekly street sweeping schedule	Currently in Public Works budget		On-going	Report volume estimate of street sweepings in annual report to DEQ.	***Complete.*** *Through street sweeping records from 10/12/15-3/25/16 averaged 6.4 CY per week, 10/03/16-12/23/16 averaged 29 CY per week, and 01/16/17-06/30/17 averaged 20 CY. New street sweeping form and policy implemented.*
Stormwater	Maintenance Program for stormwater collection system	Maintain storm system components including; catch basins, manholes and pipes.	Currently in Public Works budget. System Development Charges in place for storm drainage system		On-going		***Appendix A***

TMDL Implementation Matrix - Bacteria

Stormwater	City Council overview and acknowledgement	Review TMDL Plan, annual reports and five year review with City Council	None	Track number of times TMDL reports are covered in City Council meeting minutes	On-going	City Council approval of TMDL Plan and review reports	***Table B***
Lack of riparian vegetation; eroding streambanks	Restore riparian vegetation and streambanks	Implement Phase 1 of Bear Creek Greenway Project	$121,000	Completion of trail from Molalla Forest Rd. to Molalla city limits	5 years	Project put in fiscal year 2011/2012 budget	***Incomplete.*** *Project funding not approved in FY 11/12. Project identified as a Tier 1 trail in the Parks Master Plan. Alignment crosses privately owned industrial properties. Potential future trail opportunities possible when development occurs.*
Lack of riparian vegetation; eroding streambanks	Restore riparian vegetation and streambanks	Partner with watershed groups on riparian restoration/enhancement projects	Staffing to conduct effort; 0.10 FTE currently funded; volunteer contributions	Number of projects/efforts completed in partnership with watershed groups	2 years	Contribute to at least one project by end of 2012	***Incomplete*** *due to multiple staff turnovers since 2011.*

Lack of riparian vegetation; eroding streambanks	Protect and enhance existing vegetation in riparian areas	Enforce code for new development: 50 ft. riparian and wetland setback and protect native vegetation	Code enforcement staffing; 0.25 FTE is currently funded	Track enforcement actions/violations	On-going; code already adopted	Retain existing riparian vegetation in three developments planned through 2012	**Complete.** Full-Time Planner. Enforces Title 18 standards in all new development. *5.12.16 – Buffers have been developed for new subdivision near Bear Creek, Stoneplace Apartment Expansion, and infill near Creamery Creek.*
Cross connections of storm and sanitary sewers	Increase effectiveness and efficiency of wastewater treatment	Eliminate illicit discharge and infiltration issues in downtown core	$25,000	Average daily flow to treatment plant before and after cross connect issues addressed	December 2011	Report completion in annual report to DEQ	***Incomplete.*** *Video inspection of sanitary sewer system as part of I&I project completed in 2017. Two projects identified for I&I removal and design started in 2017. Sewer lateral connection repairs completed on Molalla Ave project. Sewer cross-connection to storm eliminated as part of project.*
Cross connections of storm and		Complete industrial trunk extension - SE Molalla. Crossing Bear Creek.	$860,000		2015 Engineering/ project procurement		***Delete.*** *Project priorities refocused on I&I repair.*

sanitary sewers							
Cross connections of storm and sanitary sewers	Decommission Septic Systems	Administer 30 day notice to connect to city sewer where feasible	Planning staff, full time.	Number new connections made annually as a result of annexations, violations discovered	On-going	Connect all residential, commercial, industrial properties within city limits to city sewer	***Complete.*** *Notices sent to all properties annexed into the City regarding deadline to connect by 2019. Waiver of sewer SDC for early connection expired.*
Illegal Discharge	Porta potties at parks in summer with no facilities and public events	Porta potties provided for public use in parks and areas with no public facilities	Currently in City budget for City funded events	Track number of porta potties used for events	On-going		***Appendix A***
Illegal Discharge	Code enforcement	Provide code enforcement form to citizens.	Currently in City budget for code enforcement	Track number of complaints	On-going	Code enforcement form has been made available on the City of Molalla website	***Appendix A Table B***

TMDL Implementation Matrix - Temperature

POLLUTANT: Temperature						**City of Molalla: TMDL Implementation Tracking Matrix**	
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 from this source?*	**HOW** *Specifically, how will this be done?*	**FISCAL ANALYSIS** *What is the expected resource need? Are there existing resources budgeted? If not, where will the resources come from?*	**MEASURE** *How will you quantitatively or qualitatively demonstrate successful implementation or completion of this strategy?*	**TIMELINE** *When do you expect it to be completed?*	**MILESTONE** *What intermediate goals do you expect to achieve, and by when, to know progress is being made?*	**STATUS** *Include summary and date.*
Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas	Enforce existing code for new development: 50 ft. riparian and wetland setback and protect native vegetation	Code enforcement staffing; 0.25 FTE is currently funded.	Track enforcement actions and violations.	On-going; code adopted	Retain existing riparian vegetation in three developments planned through 2012	**Complete.** Full-Time Planner. Enforces Title 18 standards in all new development. *5.12.16 – Buffers have been developed for new subdivision near Bear Creek, Stoneplace Apartment Expansion, and infill near Creamery Creek.*
Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas	Enhance riparian corridor along Bear Creek and Creamery Creek	Depends on grant funding and volunteer projects.	Linear feet of planting	5 years	Apply for grant funding in 2011.	***Delete.*** *City was not successful in 2011 securing grant for this project.*
Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas	Implement Phase 1 of Bear Creek Greenway Project	$121,000	Completion of trail from Molalla Forest Rd. to Molalla city limits	5 years	Project put in fiscal year 2011/2012 budget	***Incomplete.*** *Project funding not approved in FY 11/12. Project identified as a Tier 1 trail in the Parks Master Plan. Alignment crosses privately owned industrial properties. Potential future trail opportunities possible when development occurs.*

TMDL Implementation Matrix - Temperature

Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas	Promote riparian protection on private property by way of development code and public works standards	Staffing as required for plan review and enforcement	Track plan review that include riparian protection	On-going		***Appendix A***
Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas	Conduct public education on landscape design and maintenance	Staffing to conduct educational effort; 0.15 FTE currently funded	Number of bill inserts Number of meetings	2 years	Educational outreach twice a year	***Incomplete*** *due to multiple staff turnovers since 2011.*
Lack of shading in riparian areas	Protect and enhance existing vegetation	Tree protection ordinance	Staffing as required for plan review and enforcement	Track enforcement actions and violations	On-going	Maintain existing trees, where possible, on new development	***Complete***
Lack of shading in riparian areas	Partner with watershed groups; Molalla River Alliance; Clackamas SWCD	Establish a working relationship with Clackamas SWCD, Molalla River Watch and Molalla River Alliance	Staffing to conduct educational effort	Number of projects completed in partnership with watershed groups, number of site visits performed, times bill-inserts are included.	2 years	Attend at least three partnership meeting by Spring 2012	***Incomplete*** *due to multiple staff turnovers since 2011.*
Lack of shading in riparian areas		Partner on riparian restoration/enhancement projects	Volunteer, staffing as required		2 years	Contribute to at least one project by end of 2012	***Incomplete*** *due to multiple staff turnovers since 2011.*
Lack of shading in riparian areas		Partner on public education/outreach opportunities	Volunteer, staffing as required		2 years	Participate in at least one public outreach with partner by end of 2012	***Incomplete*** *due to multiple staff turnovers since 2011.*
Lack of shading in riparian areas	Tree planting	Establish tree planting program by way of development code	In City budget for Code enforcement staffing	Number of trees planted	On-going	Tree planting requirements for new development have been added to the development code	***Appendix A***
Stormwater	City Council overview and acknowledgement	Review TMDL Plan, annual reports and five year review with City Council	None	Track number of times TMDL reports are covered in City Council meeting minutes	On-going	City Council approval of TMDL Plan and review reports	***Table B***

Reduced stream flow in Molalla River and tributaries	Reduce municipal water diversion	Water conservation efforts driven primarily by public education	Staffing to conduct educational effort; 0.15 FTE currently funded	Number of bill inserts mailed Number public service announcements Monitor total water use	On-going	First year: just establish reporting Educational outreach twice a year Water use reported annually	***Complete.*** *In May 2015 City mailed approx. 2900 Water Conservation flyers in Water Bills. Promoted Water Conservation in Annual 4th of July Parade and handed out flyers. Flyers and handouts available at Aug. 2015 National Night Out.*
Wastewater treatment plant discharge	Maintain low effluent temperatures	Maintain compliance with NPDES permit requirements	Wastewater treatment staff; funded positions	Molalla River temperature monitoring	Continuous temperature measurement; monthly permit reporting	Report instream temperature monitoring with annual TMDL implementation report	***Complete.*** *Continuous monitoring effluent temperature gauge installed at DEQ approved location in 2015.*

City of Molalla

Clackamas County, Oregon

TMDL IMPLEMENTATION PLAN

FEBRUARY 2018

The Dyer Partnership
Engineers & Planners, Inc.

Project No. 100.27

1330 Teakwood Avenue
Coos Bay, Oregon 97420
(541) 269-0732
www.dyerpart.com

759 West Central Avenue
Sutherlin, Oregon 97479
(541) 459-4619

1165 South Park Street
Lebanon, Oregon 97355
(541) 405-4520

Table of Contents

SECTION 1: **INTRODUCTION & BACKGROUND**

1.1 Introduction

This document is the Total Maximum Daily Load (TMDL) Implementation Plan for the City of Molalla. This plan is intended to comply with the Willamette Basin TMDL order and to meet pollutant load allocations for the Molalla-Pudding Subbasin, as approved by the US Environmental Protection Agency (EPA) in December 2008. The goal of this Implementation Plan is to minimize and reduce temperature, bacteria and mercury contributions to surface waters within the jurisdictional control of the City of Molalla.

Through a multi-faceted approach of monitoring, land use and development standards, public operations, partnerships, and education, this plan targets sources of contamination within the City's authority.

1.2 Background

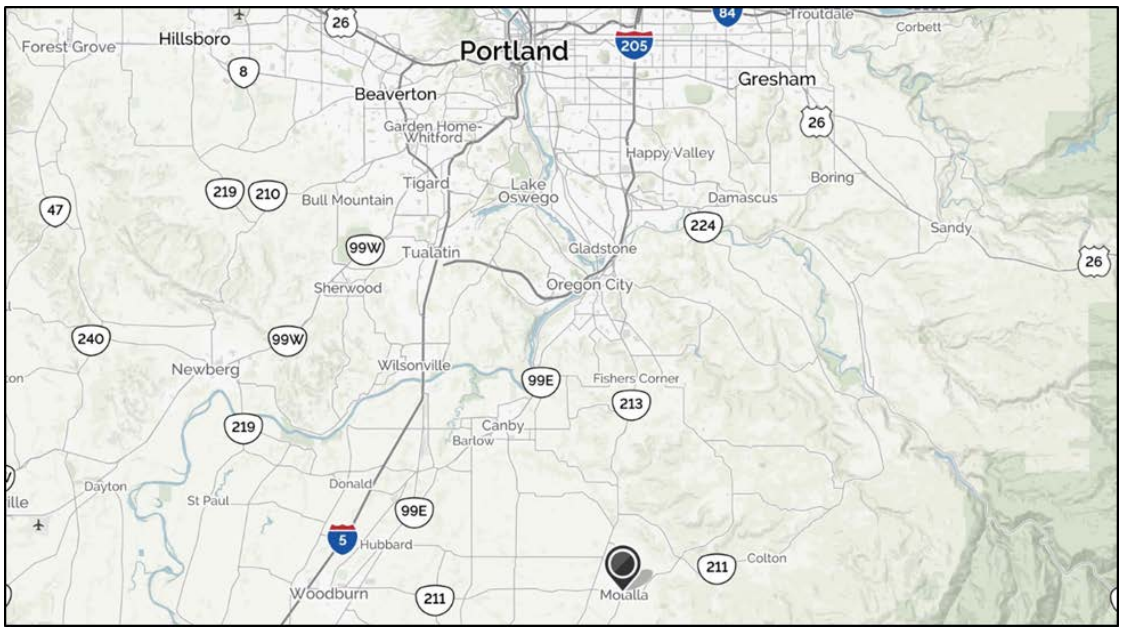
The Molalla-Pudding Subbasin (approximately 878 square miles in area) is located in the north-eastern portion of the middle Willamette Basin. The Molalla River flows into the Willamette River between river miles 35 and 36 and the Pudding River is a tributary to the Molalla River less than a mile upstream of the Molalla River mouth. The subbasin is located within Clackamas and Marion Counties and includes the communities of Woodburn, Mt. Angel, Silverton, Canby, Molalla, Hubbard, Gervais, Aurora, Brooks, Barlow, Colton and Scotts Mills and portions of Salem, Keizer, Donald, and Wilsonville.

The City of Molalla is a fast growing rural community located in the southwest section of Clackamas County. The City's population was estimated to be 9,939 in 2017 by Portland State University Population Center.

The City is approximately 14 miles south of Oregon City via State Highway 213, approximately 25 miles northeast of Salem, and approximately 27 miles southeast of Portland. The surrounding area around the City of Molalla is generally used for agricultural purposes. Highway 213 runs north-south through the western end of the City, and Highway 211 runs east-west through the midsection of the City. Figure 1.2.1 illustrates the location of the City.

The City is located at approximately river mile 20 of the Molalla River, which is located about a mile east of the City's current urban growth boundary (UGB). Two branches of Creamery Creek flow through the north end of the City and run generally from the southeast to the northwest. These branches meet east of Highway 213, and Creamery Creek flows into the Molalla River several miles outside the UGB. Bear Creek, which runs generally parallel to and south of Creamery Creek, flows through the south end of the UGB before turning northwest through the City. Bear Creek exits through the west end of the City before eventually flowing into the Pudding River.

FIGURE 1.2.1
CITY LOCATION



In 2001, the City completed a Local Wetland Inventory (LWI) and riparian assessment that describes and maps potentially jurisdictional wetlands and streams within the City's UGB. The LWI was approved by the Oregon Department of State Lands (DSL) in March of 2004 and notes the three drainage basins within the City of Molalla Urban Growth Boundary (UGB) as follows:

- The northeastern portion of the UGB is within the Molalla River basin; drainage from this basin flows northeastward via a natural drainage way to the Molalla River.
- The central portion of the UGB is within the Creamery Creek basin; Creamery Creek flows diagonally from the southeast to the northwest before reaching the Molalla River north of the UGB.
- The southern portion of the UGB is within the Bear Creek basin. Bear Creek joins Kaiser Creek (located south of the UGB) to flow to the Pudding River many miles to the west.

The City operates and discharges treated wastewater under Waste Discharge Permit No. 101514 from the National Pollutant Discharge Elimination System (NPDES). From May 1st to October 31st, discharge to waters of the state is prohibited, and recycled water is land applied onto DEQ approved sites. The recycled water used for irrigation is treated to the same standards as effluent discharged to the Molalla River, except that effluent discharged to the river is dechlorinated using ascorbic acid (Vitamin C). From November 1st to April 30th, effluent is discharged to the Molalla River in accordance with the NPDES Permit.

SECTION 2: **TMDL REQUIREMENTS & PARAMETERS**

2.1 TMDL Requirements

The Oregon Department of Environmental Quality (DEQ) established a Total Maximum Daily Load (TMDL) for the Willamette Basin in an order signed on September 21, 2006. The TMDL requires designated agencies and municipalities to implement actions to improve water quality. The pollutants addressed in the 2006 Willamette Basin TMDL that specifically affect Molalla are bacteria, temperature, and mercury.

The Clean Water Act of 1977 "authorizes the U.S. Environmental Protection Agency (EPA) to "restore and maintain the physical, chemical, and biological integrity of all waters of the nation" (DEQ, 2004). In response to the Clean Water Act, the EPA designated state agencies to develop water quality standards, perform water quality monitoring to understand current conditions, determine sources of pollution, and develop TMDLs as a tool to improve water quality. As a component of the overall effort to protect and restore the beneficial uses of Oregon's water bodies, the DEQ issued TMDLs for the entire Willamette Basin.

The TMDL process begins when a stream, lake, or river does not meet water quality standards and is classified as water quality-limited on the state's 303(d) list. TMDLs identify the maximum amount of a specific pollutant that can be present in a water body without violating water quality standards. This is known as the loading capacity.

After extensive water quality monitoring and modeling efforts, TMDLs establish the difference between the loading capacity and the current pollutant load. TMDLs are expressed as numeric standards or percent pollutant reductions that need to be met to bring water bodies into compliance with water quality standards. The difference between the current load and the loading capacity is known as excess load (DEQ, 2004).

The excess load is split up between the different sources of pollution according to their contribution to the overall pollution load. Any difference between the waterway's loading capacity and the current pollutant load must be mitigated by pollution reduction activities. The DEQ develops waste load allocations for point sources such as wastewater treatment plants and industrial discharges. They develop load allocations for non-point pollution from agricultural, urban, and forestry lands such as erosion, animal wastes, and stormwater.

The Oregon Administrative Rule (OAR 340-042-0025) that addresses TMDLs requires local governments and other agencies to develop TMDL Implementation Plans. Responsible parties that are able to implement pollution reduction strategies are classified as Designated Management Agencies (DMAs). In the Willamette Basin, DMAs include federal agencies such as the Bureau of Land Management, state agencies such as the Department of Forestry and the Department of Agriculture, counties, cities, and others.

The Oregon Department of Agriculture (ODA) is working with farmers to address contributions from farmland, the Oregon Department of Forestry is addressing contributions from forestland, and federal land management agencies are implementing TMDLs according to their internal

procedures. Point sources, such as wastewater treatment facilities will be addressed through their individual permitting processes. Cities and counties must address contributions through the development of Implementation Plans.

According to OAR 340-042-0025, TMDL Implementation Plans must include the following five elements:

1. Management strategies that will be used to achieve load allocations.
2. A timeline and schedule to achieve measurable milestones.
3. A plan for periodic review and revision of the implementation plan.
4. Evidence of compliance with applicable statewide land use requirements.
5. Any other analyses or information as specified in the Water Quality Management Plan.

2.2 TMDL Parameters

Temperature, bacteria, and mercury are the three parameters that have been included in all of the Willamette Basin TMDLs. Although other parameters are included in sub basin TMDLs, these three pollutants are the major concerns throughout the entire Willamette Basin.

Following are brief summaries of these three TMDL parameters, but more in-depth information on these parameters and the processes used to develop the TMDLs can be found in Chapters 2, 3, and 4 of the *Willamette Basin TMDL* (DEQ, 2006). The summaries below include basic information about the characteristics of the parameter, the potential sources of each pollutant, waterways in the region not meeting water quality standards, and a brief list of potential strategies to address each parameter.

2.3 Temperature

The temperature problem in the Willamette Basin is that the water is too warm at certain times of year and poses a threat to cold water fish species such as salmon. This is known as thermal pollution. Removal or disturbance of streamside vegetation is the primary activity that negatively impacts stream temperature due to the loss of shade cover, but water temperature is also affected by erosion, loss of channel complexity, low stream flows, dams, and heated discharges from industrial or municipal operations.

The major sources of thermal pollution that the DEQ evaluated for the Willamette Basin temperature TMDLs are wastewater treatment facilities, dam and reservoir operations, and the loss of streamside vegetation. Point sources will continue to be regulated through the existing National Pollution Discharge Elimination System (NPDES) permit methods. Sewage treatment plants, as well as large industrial permitted discharges, will be allocated heat loads during the next renewal of their NPDES permits.

The focus of the non-point source temperature TMDL is to mitigate the removal or disturbance of streamside vegetation. The most effective way to minimize thermal pollution is by reducing the amount of solar radiation that reaches the water. This is accomplished by protecting and reestablishing vegetation along waterways to provide shade cover. Temperature benefits can

also be realized through stream restoration projects including stream bank stabilization, increasing stream flows, decreasing channel width, and restoring channel complexity.

Temperature TMDLs have been developed for the Willamette sub basins and mainstream Willamette River. The DEQ used two different approaches in developing the temperature TMDLs. One TMDL focuses on the mainstream Willamette River and its major tributaries up to the first dam. Using the other approach, the DEQ developed TMDLs on a more localized scale for stream segments upriver from dams.

The maximum temperature increase in the waters of the state from all human activities can be no more than 0.3° C. This was designated by the State of Oregon in Oregon Administrative Rule 340-041-0028. In the TMDLs, this allowance is known as the Human Use Allowance and is split up between various sources of human-caused thermal pollution. Models indicate that restoring shade cover to natural levels could reduce temperatures in the mainstream Willamette River by 0.5° Celsius (DEQ, 2004).

The amount allocated to each source of thermal pollution varies by location. Generally, non-point sources are allowed to contribute no more than 0.05° C, and point sources can contribute up to .25° C. The TMDL allocates 0.05° C to the U.S. Army Corps of Engineers Willamette Project reservoirs. The DEQ factors in 0.05° as a reserve capacity that will be set aside now to accommodate future growth by meeting the increased demand for industrial and municipal wastewater discharges.

On average, waterways in the Willamette Basin need to receive 23 percent less thermal input than is currently being received (DEQ, 2004). The major consequence of the temperature TMDLs is the need to protect and restore streamside vegetation. Thermal pollution can be addressed by a variety of measures, including:

- Develop materials for landowners explaining the benefits of preserving natural streamside vegetation.
- Implement demonstration projects on public land to illustrate potential riparian management techniques.
- Actively restore riparian areas on public land and help private property owners restore riparian areas on private land.
- Institute a riparian ordinance that prohibits the removal of native streamside vegetation.
- Acquire critical streamside property.
- Become involved in a water quality trading program.

2.4 Bacteria

The Molalla-Pudding subbasin TMDL addresses seven bacteria-impaired stream reaches from both the 2004-06 and 2002 303(d) lists. The 2002 bacteria listings for the Molalla River from river mile 0 to 25 and the summer (June 1 – September 30) listing for the Pudding River from river mile 0 to 35.4 had been removed from the 2004-06 303(d) list, but a review of data indicated that the bacteria criteria could be exceeded at the highest stream flows on the Molalla River and during the summer on the Pudding River. For those reasons, a bacteria TMDL was

completed for the Molalla River and the summer season for the Pudding River. Analysis of bacteria data, stream flows, and precipitation indicates that the main sources of bacterial contamination in the Molalla and Pudding Rivers and their tributaries are nonpoint sources. Non-point sources include agricultural runoff and urban stormwater, though runoff from forestry land use does not appear to cause the bacteria criteria to be exceeded. Load allocations are expressed in terms of a surrogate measure – percent reduction in bacteria concentrations. Load allocations apply generally by land use, basin-wide, and year-round. Stream and season-specific load allocations were calculated for streams where sufficient stream flow data were available to calculate a loading capacity and excess load. Load allocations, as percent reductions, were reduced until no one sample (based on available data) exceeded the single sample criterion of 406 *E.coli* organisms per 100 milliliters.

The Willamette Basin Bacteria TMDL states that urban areas must reduce their bacteria contributions by 80-94% to meet water quality standards. According to the Willamette Basin TMDL, point sources in the upper reaches of the Willamette Basin cause less than a one percent increase in the bacteria concentrations over natural conditions (DEQ, 2006). Accordingly, the focus of the TMDL implementation efforts should be on non-point sources.

Bacteria violations of water quality standards are most common in creeks and streams that drain urban and agricultural land. The mainstream Willamette River is water quality limited for bacteria during the high flows of the fall-winter-spring months, but is in compliance during summer low flows when there is the least amount of runoff.

Above Willamette Falls, violations in the bacteria standards are usually single sample events that are related to high levels of precipitation and the resulting runoff. The major sources of bacteria in the urban and rural residential areas are stormwater runoff, erosion, domestic and wild animal waste, failing septic systems, and municipal sewer overflows. Other sources of bacteria include livestock, irrigation runoff, and stream bank erosion.

Local jurisdictions can focus on urban issues to ensure that the quality of water does not degrade due to current land use, population growth, and land use changes. Strategy options to address bacteria in the urban area include:

- Preventing erosion and controlling sediment from new construction.
- Detaining and treating stormwater prior to discharge into waterways.
- Keeping stormwater conveyance channels clear of organic matter.
- Controlling animal waste.
- Maintaining and restoring riparian buffers.
- Encouraging better site design to decrease runoff.
- Preventing non-stormwater and illegal discharges.
- Developing stewardship and educational programs to prevent pollution.
- Street sweeping.

2.5 Mercury

Mercury is a very complex pollutant. The way it acts in nature and the different forms it takes make it difficult to understand and accurately monitor. With no regard to local, state, or even international boundaries, mercury can be transported in the air after soil disturbance, automobile emissions, and industrial emissions across many miles and deposited by rainfall.

Air deposition from emissions is one of many ways that mercury moves through the environment. Some point sources, including timber processing plants and mills, discharge low levels of mercury in their wastewater effluent. Stormwater runoff suspends mercury molecules and carries them to waterways.

Mercury is naturally occurring at low levels, but when native soil erodes at an accelerated rate those molecules are released in abnormal amounts. Mercury is also set in motion when sediment that has been deposited long ago is re-suspended due to high water flows or a significant disturbance.

High mercury levels in the Willamette Basin have resulted in fish consumption advisories. To protect public health, especially that of pregnant women and young children, the Department of Human Services (DHS) has issued advisories recommending that people limit the amount of fish they consume from certain waterways. For example, the DHS specifically advises against consuming large amounts of fish from the Willamette River due to the high levels of mercury.

Despite the uncertainty and complex nature of mercury, there are steps that can be taken to minimize the amount of mercury that is deposited in waterways and accumulated in the tissues of fish, wildlife, and humans. The goal of the mercury TMDL is "to reduce mercury levels in the basin to a point where fish are no longer unsafe to eat" (DEQ, 2006).

To begin addressing the mercury problem in the Willamette Basin, DEQ has developed interim allocations for point sources and non-point sources pending the results of more in-depth research. Instead of specific allocations, the DEQ calculates the interim mercury TMDLs based on two categories: non-point and point sources.

The DEQ expects all non-point sources to begin implementing mercury reduction management strategies and policies. The TMDL will be revised in the future to be more specific according to the results of further research.

Implementation plans must include a mercury reduction strategy "that includes feasible measures to minimize mercury runoff" (DEQ, 2006). DMAs have an array of options to reduce mercury pollution. Many of the management strategies that address mercury pollution also address bacteria and temperature. Potential management strategies include:

- Working with dentist offices to properly dispose of mercury wastes.
- Establishing a stormwater plan.
- Stormwater detention and treatment prior to discharge into waterways.
- Establishing an erosion prevention and sediment control program.

- Regular street sweeping and stormwater system maintenance.
- Limiting land disturbance whenever possible.

SECTION 3: **WATER QUALITY EFFORTS**

The City of Molalla currently has several efforts underway that address water quality issues. Molalla's Development Code and 2017 Molalla Standard Specifications for Public Works Construction include erosion control requirements, riparian area and tree protection, vegetation and tree planting, stormwater quality design standards, and encouragement of low impact development.

Additionally, the City maintains street sweeping and animal waste pick up programs, has adopted a Parks Master Plan that promotes the protection and enhancement of vegetation and riparian areas, and continues efforts to educate the public about water conservation.

3.1 Molalla Development Code

The City of Molalla completed and adopted revisions to the City of Molalla Development Code (Code) on October 11, 2017. Code sections in place to uphold water quality efforts are summarized below.

17-2.4.030 Water Resources (WR) Overlay
The WR Overlay District has been established and is intended to protect and enhance significant wetlands, stream corridors and floodplains identified in the Molalla Natural Features Inventory by conserving significant riparian corridors, undeveloped floodplains, and locally significant wetlands in keeping with the requirements of State Planning Goal 5 (Natural Resources) and applicable state statutes, administrative rules, and the Molalla Comprehensive Plan.

The WR Overlay District includes the riparian corridor extending upland 50 feet from the tops-of-bank of Bear Creek, Creamery Creek and the Molalla River. Where a significant wetland is located fully or partially within the riparian corridor, the riparian corridor shall extend 50 feet upland from the edge of the wetland and the riparian area for isolated wetlands shall extend 25 feet from the edge of the wetland. The district also includes the 100-year flood plain on properties identified as vacant or partially vacant on the 2007 Molalla Buildable Lands Inventory.

Native vegetation removal and building, paving, grading and filling is restricted within the WR Overlay riparian corridors.

17-3.2 – Building Orientation and Design/Non-Residential Buildings
Site design standards for non-residential buildings may be waived if a significant tree or other environmental feature precludes strict adherence to the standard and will be retained and incorporated into the design.

17-3.4.030 – Landscaping and Screening
All portions of lots not otherwise developed with buildings, accessory structures, vehicle maneuvering areas, or parking lots shall be landscaped. All lots shall conform to the minimum landscape areas standards for the applicable zoning district, as outlined in the Code. A

combination of deciduous and deciduous and evergreen trees, shrubs, and ground covers shall be used for all planted areas. Existing mature trees that can thrive in a developed area and that do not conflict with other provisions of the Code shall be retained where specimens are in good health, have desirable aesthetic characteristics, and do not present a hazard.

3.2 2017 Molalla Standard Specifications for Public Works Construction

The City of Molalla adopted the current 2017 Molalla Standard Specifications for Public Works Construction (PW Standards) on September 6, 2017. Sections found in the PW Standards related to water quality efforts are summarized below.

1.17.16 Preservation, Restoration, and Cleanup
Street Cleanup – On all construction projects, the contractor shall clean spilled soil, mud, rock, gravel, or other foreign material caused by construction operations from sidewalks, gutters, streets, and roads at the conclusion of each day's operation.

1.18.4 Erosion Prevention and Sediment Control
It is the goal of the City to eliminate or minimize to the extent feasible all sediment and other pollutants reaching the public storm and surface water system resulting from development, construction, grading, excavating, clearing and any other activity that accelerates erosion. It is the policy of the City to require temporary and permanent measures for all construction projects to lessen the adverse effects of construction on the environment. All projects shall have a current DEQ 1200-C permit, as required by the State of Oregon, and include properly installed, operated, and maintained temporary and permanent erosion-control measures as provided in the PW Standards or in an approved erosion control plan.

Existing vegetation shall be protected and left in place whenever practicable. Where existing vegetation has been removed, or the original land contours have been disturbed, the site shall be revegetated, and the vegetation established, as soon as practicable.

3.1.2 General Design Requirements (Stormwater)
In developing drainage plans for stormwater management, the design engineer is encouraged to provide, to the extent feasible, on-site stormwater management through the use of Low Impact Development (LID) principles. The primary Stormwater management objective for LID is to match pre-development (bare site) hydrologic condition over the full range of rainfall intensities and durations as detailed in Section 3.3 of the PW Standards. LID principals include, but are not limited to:

- Integration of stormwater management into site planning activities.
- Use of natural hydrologic functions as the integrating framework.
- Minimize site disturbance.
- Focus on prevention rather than mitigation.
- Emphasize simple, nonstructural, low-tech, and low cost methods.
- Manage stormwater as close to the source as possible.
- Distribute small-scale LID techniques throughout the landscape.
- Create a multifunctional landscape.

3.3.9 Detention/Retention Facility Protection (Stormwater)
Stormwater quantity detention/retention facilities and stormwater quality facilities shall be designed to prevent scouring at the inflow structure(s) by use of an engineered energy-dissipating device such as a Swale Inflow Spreader or other method approved by the Public Works Department authorized representative.

3.3.10 Drainage Report (Stormwater)
A drainage report, prepared by a professional engineer registered in the State of Oregon, shall be submitted for proposed developments. The detailed report shall include a description of the land cover resulting from the proposed project, a description of the potential stormwater quantity and quality impacts of the project, a description of the proposed methods for collection and conveyance of runoff from the project site, and proposed methods for control of any increase in stormwater quantity and for maintenance of stormwater quality.

3.5.1 Water Quality Facility Design Standards (Stormwater)
New development and other activities that create new imperious surfaces or increase in the amount of stormwater runoff or pollution leaving the site are require to construct or fund permanent water quality facilities to reduce contaminants entering the stormwater and surface water system. Stormwater quality facilities shall be designed to capture and treat 80% of the average annual runoff volume, to the maximum extent possible, with the goal of 70% total suspended solids (TSS) removal.

3.10 Stormwater Quality Facility Design
The purpose of Section 10 is to outline the design and construction guidelines for water quality facilities in the City of Molalla. The guidelines set forth in Section 10 may be used to comply with the water quality facility design standards in Subsection 3.5. It is the responsibility of the design engineer to determine the appropriate design criteria that ensures compliance with the PW Standards, in combination with federal, state and local laws and ordinances. Facility design criteria are presented for the following facility types:

- Biofiltration Swales
- Sand Filters
- Wet Ponds
- Extended Wet Ponds
- Extended Dry Ponds
- Wetlands
- Infiltration Trenches
- Infiltration Basins

3.3 Parks Plan

In 2014 the City of Molalla adopted a Parks Master Plan that promotes the protection and enhancement of vegetation and riparian areas.

The City currently has a significant amount of passive open space and exceeds recommended standards for natural areas based on the current supply. Community members have expressed

support for preserving these spaces and acquiring additional open space throughout the City as new development occurs. The plan recommends that the City incorporate the following types of areas in establishing and maintaining the city-wide open space system:

- Continue to require dedication of a specific percentage of open space as part of the subdivision and residential development review processes.
- Combine designation of open space with protection of environmentally sensitive or natural areas.
- In targeting specific areas for open space acquisition, dedication or protection, prioritize natural area and open space protection and management to maximize natural resource values.
- Identify, acquire and conserve key open space areas adjacent to proposed trail corridors or linear parks, including the Bear Creek corridor. Use these to enhance the trail system and provide for well-connected pockets of open space throughout the community.

3.4 Street Sweeping Program

The City of Molalla maintains a street sweeping program that utilizes a City owned street sweeper. The City has adopted a public works policy that requires department personal to track street sweeping activities using a street sweeping zone map and summary log. The summary log provides personnel a method to track the zones and/or streets that were cleaned and the opportunity to report any noticeable sources of pollution. In 2017, the City estimates that 20 cubic yards of material per week were removed from City Streets.

3.5 Stormwater System Maintenance

In order to continue to provide a viable stormwater collection system, the City maintains a budget within the Public Works Department for stormwater maintenance. A full time City crew is available for the upkeep of catch basins, manholes and pipelines.

3.6 Pet Waste

Dog waste stations have been installed in Sheets Field, Pocket, Basketball, Clark, Fox, Ivor Davies and Long city parks. The City has a stock of 4,000 replacement waste bags and replenishes the waste station bags on a regular basis.

3.7 Water Conservation Outreach

In 2015 the City of Molalla included approximately 2,900 water conservation flyers in their May residential and commercial water bills. The flyers were also handed out at the City's 2015 National Night out, to further promote water conservation. Additionally, the City's website includes a tip sheet for indoor and outdoor water conservation.

SECTION 4: **IMPLEMENTATION STRATEGIES**

The City of Molalla will continue with the water quality efforts outlined in Section 3 and work to implement the strategies and activities provided in this section. The City's goal is to adopt this Plan and utilize the implementation strategies to reduce contributions of increased temperatures, bacteria, mercury and pollutants to surface waters within the City's jurisdiction.

4.1 Stormwater System Planning

Stormwater planning and management is the City's primary focus for addressing the reduction of TMDL pollutants. Coordinated efforts by all City departments within the City are needed to manage stormwater and reduce pollutants covered in the Willamette Basin and Molalla-Pudding Subbasin TMDL.

The City will continue to follow the recommendations of the 2003 Stormwater Master Plan to implement upgrades and improvements, in order to maintain a well working stormwater conveyance system. The master plan will continue to be available on the City's website to help educate developers and the public about the stormwater issues and hydrology of the City.

As the existing Stormwater Master Plan reaches the end of its 20-year design life, it will require updating. The updated Stormwater Master Plan will need to include water quality protection mechanisms to ensure that future stormwater system expansions and upgrades are designed and constructed with the consideration of water quality.

Revisions to the Molalla Development Code and PW Standards have incorporated requirements to uphold stormwater water quality efforts and erosion control for new development and construction. The City will work to educate the public and developers on the implementation of these codes and standards to ensure the water quality standards set forth are met.

4.2 Wastewater System Planning

In 2017, the City began work on updating their 2000 Wastewater Facilities Master Plan. This work includes an extensive evaluation of the Wastewater Treatment Plant (WWTP) and collection system.

The WWTP evaluation will include recommendations for plant upgrades and modifications that will address discharge loading. Recommendations will be such that the City can maintain mass load limits and temperature compliance with their NPDES discharge permit.

The collection system evaluation will focus on Inflow and Infiltration (I/I) issues and provide recommendations to address areas of concern. With the adoption of the new facilities plan, the City will establish and I/I reduction program that focuses on the decrease of system I/I and elimination of cross connections between the storm and sanitary sewer systems.

4.3 Riparian Protection and Restoration

The City of Molalla has been proactive in their efforts to protect riparian areas within the City. The City's development code has established a Water Resources Overlay District, which protects the riparian corridors of Bear Creek, Creamery Creek and the Molalla River. The City will continue to adhere to the development code and work to educate developers and public about the importance of the code and the protection of the riparian areas.

The City has adopted a Parks Plan that recommends the protection of environmentally sensitive or natural areas. The Parks Plan provides recommended trail projects that provide the opportunity to improve riparian and stream areas. The following trail projects were identified as Tier 1 (5-15 year implementation) projects by the Project Advisory Committee and will be considered by the City when budget allows and/or development occurs in the proposed trial area:

- Molalla Rail Trail
- Bear Creek Greenway
- Land Lab Trail
- Cole Avenue Trail
- Rail High School Connector

4.4 Public Education

The City will continue to use existing methods to inform and distribute information to residents and developers about the importance of water quality and conservation and protection and enhancement of existing vegetation in riparian areas. These methods include the City's website, City Hall, monthly billing statements, and City Staff meetings.

Building relationships with local watershed groups will also be considered as budget and staff availability allows. Fostering these relationships will provide the City the opportunity to educate the public on restoration and enhancement opportunities promoted by these groups.

4.5 Erosion Control

As discussed in Section 3, the goal of the City's current Public Works Design Standards is to eliminate or minimize to the extent feasible all sediment and other pollutants reaching the public storm and surface water system resulting from development, construction, grading, excavating, clearing and any other activity that accelerates erosion. The City requires temporary and permanent measures for all construction projects to lessen the adverse effects of construction on the environment. All projects are required to have a current DEQ 1200-C permit, as required by the State of Oregon, and include properly installed, operated, and maintained temporary and permanent erosion-control measures as provided in the Standards or in an approved erosion control plan. The City will continue efforts to ensure that all new development plans incorporate the required erosion control. The City will also continue project inspection efforts to make certain that the requirements of the design standards are adhered to.

The City will continue efforts to manage the Water Resources Overlay District, which was established to protect and enhance wetlands, stream corridors and floodplains. Doing so will lessen the amount of land vulnerable to excessive erosion and reduce activities that create unnecessary erosion and sediment runoff in these areas.

4.6 Illegal Discharge

To address illegal discharge of waste, the City will continue to promote the annual Spring Cleanup provided by Molalla Sanitary Services. While many items that can contribute to illegal discharge are accepted at this event (motor oil and household appliances), hazardous wastes are not. For hazardous waste disposal, the City will continue to provide information to the public regarding the availability of hazardous waste drop off at Oregon Metro, located in Oregon City.

The City provides a pharmaceutical disposal facility in the Police Department located at City Hall. The City will maintain this facility and continue to provide information about proper disposal and use of this facility on their website, which includes the following linked brochure:

- www.clackamasproviders.org/images/stories/BB-BrochureFINAL.pdf

The City has budgeted to provide portable toilets for public use in parks and areas, with no public facilities, during City funded events.

4.7 Animal Waste Management

The City will continue to maintain and stock the dog waste stations have been installed in city parks as detailed in Section 3.

4.8 Mercury and Pollutants

Because mercury and pollutant reduction encompass many of the implementation activities and water quality efforts outlined in Sections 3 and 4 of this plan, the City's overall goal to reduce these contaminants is to adhere to the implementation strategies. These strategies include stormwater system planning, erosion control standards, limiting land disturbance, reducing hazardous waste discharge and street sweeping.

SECTION 5: **MONITORING, REPORTING, COMPLIANCE & FUNDING**

The City of Molalla understands the importance of monitoring the implementation strategies addressed in their TMDL Implementation Plan. The City will actively track the implementation progress of the strategies as outlined in the Plan and TMDL Implementation Matrix (Section 6). The City will also monitor the effectiveness of each strategy with respect to how well each is removing pollutants, either qualitatively or quantitatively.

The City will provide DEQ with an annual review of the Plan and Matrix and provide a progress and effectiveness updates for each strategy. The review will also highlight any updates or revisions to the Plan or Matrix that may be required. The City will also review, evaluate and revise the TMDL Implementation Plan in its entirety every five years, following the approval of the final version of the Plan. The review will include a summary of accomplishments and any hindrances that have or will affect implementation progress. Revisions, additions, or restructuring required to create a new, modified plan will be coordinated with DEQ. Both the annual and five year reviews will be presented to City Council for review.

5.1 Public Involvement

A key aspect to monitoring progress of the implantation strategies is public input. The City Council will be presented with the final TMDL Implementation Plan and encouraged to adopt the strategies set forth and educate the residents of Molalla of its importance.

A Code enforcement reporting form has been made available on the City's website. Through this reporting, the City will utilize the public's input to address any code issues witnessed that may affect the goals of this Plan.

5.2 Land Use Compliance

All strategies and activities listed in this Plan and Implementation Matrix are consistent with the City of Molalla land use plans. The Plan has been reviewed by City staff for consistency with local and state planning goals. All revisions to the TMDL implementation Plan will include a review for land use compatibility with the City staff. The City will also consider the Plan when developing or revising City ordinances that involve land use.

5.3 Funding

Implementation of the TMDL strategies covered in this Plan is essential to the success of the overall Plan and the work to reduce pollutants from the City of Molalla. The City has identified a number of strategies to accomplish this reduction. Some of these strategies are small in nature and easy to implement and will be intergraded into workloads of existing staff and use general funds that are already allocated or will be allocated in coming years. Larger strategies will require further planning as budget becomes available and may also require the City to seek

outside funding in the way of loans or grants. The City will review the strategies on an annual basis and look for possible funding sources in order to begin the implementation.

The City has established a Surface Water Utility User Charge that is based on the amount of impervious area on a property. The fees collected from residential, commercial, and industrial sites will be allocated to the maintenance and improvement of the existing stormwater collection system.

SECTION 6: **TMDL IMPLEMENTATION MATRIX**

The following matrix details the strategies that will be implemented in the within the next five years. Some of these strategies will be implemented only if funding allows. The matrix shows the pollutant being addressed, the strategy to address it, the time table for implementation, and how progress and success will be monitored. This matrix will serve as the tracking tool for annual reporting to DEQ.

TMDL Implementation Matrix - Temperature

POLLUTANT: Temperature						**City of Molalla: TMDL Implementation Tracking Matrix**	
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 from this source?*	**HOW** *Specifically, how will this be done?*	**FISCAL ANALYSIS** *What is the expected resource need? Are there existing resources budgeted? If not, where will the resources come from?*	**MEASURE** *How will you quantitatively or qualitatively demonstrate successful implementation or completion of this strategy?*	**TIMELINE** *When do you expect it to be completed?*	**MILESTONE** *What intermediate goals do you expect to achieve, and by when, to know progress is being made?*	**STATUS** *Include summary and date.*
Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas.	Enforce existing code for new development: 50 ft. riparian and wetland setback and protect native vegetation.	Code enforcement staffing; 0.20 FTE is currently funded.	Track enforcement actions and violations.	On-going; code adopted	Retain existing riparian vegetation developments planned through 2020.	
Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas.	Implement Phase 1 of Bear Creek Greenway Project. Approximately 7,500 LF of 8-10' wide pathway through private industrial and residential lands.	$480,000	Completion of trail from Molalla Forest Rd. to Molalla city limits.	5-15 years	Annual review of budget for possible implementation or private development.	
Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas.	Promote riparian protection on private property by way of development code and public works standards.	Staffing as required for plan review and enforcement.	Track plan review that include riparian protection.	On-going; Code adopted	Retain existing riparian vegetation developments planned through 2020.	
Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas.	Conduct public education on protection of riparian areas.	Staffing to conduct educational effort; 0.20 FTE currently funded.	Number of bill inserts and website postings. Number of meetings.	On-going	Educational outreach once per year through 2020.	
Lack of shading in riparian areas	Protect and enhance existing vegetation	Tree protection ordinance.	Staffing as required for plan review and enforcement.	Track enforcement actions and violations.	On-going	Maintain existing trees, where possible, on new development.	

TMDL Implementation Matrix - Temperature

Lack of shading in riparian areas	Partner with watershed groups and Clackamas SWCD where possible.	Establish a working relationship with Clackamas SWCD and watershed groups where possible.	Staffing to conduct educational effort.	Number of projects completed in partnership with watershed groups, number of site visits performed, times bill-inserts are included.	5 years	Attend at least one meeting annually through 2020.	
Lack of shading in riparian areas		Partner on riparian restoration/enhancement projects.	Volunteer and staffing as required.		5 years	Contribute to at least one project by end of 2020.	
Lack of shading in riparian areas		Partner on public education/outreach opportunities.	Volunteer and staffing as required.		5 years	Participate in at least one public outreach with partner by end of 2020.	
Lack of shading in riparian areas	Tree planting	Establish tree planting program by way of development code.	In City budget for Code enforcement staffing.	Number of trees planted.	On-going	Establish list of projects that provided new trees through 2020.	
Stormwater	City Council overview and acknowledgement.	Review TMDL Plan, annual reports and five year review with City Council.	None	Track number of times TMDL reports are covered in City Council meeting minutes.	On-going	City Council approval of TMDL Plan and review reports.	
Reduced stream flow in Molalla River and tributaries	Reduce municipal water diversion.	Water conservation efforts driven primarily by public education.	Staffing to conduct educational effort; 0.15 FTE currently funded.	Number of bill inserts mailed. Number public service announcements. Monitor total water use.	On-going	Educational outreach once a year through 2020. Water use reported annually.	
Wastewater treatment plant discharge	Maintain low effluent temperatures.	Maintain compliance with NPDES permit requirements.	Wastewater treatment staff; funded positions.	Molalla River temperature monitoring.	Continuous temperature measurement; monthly permit reporting.	Report instream temperature monitoring with annual TMDL implementation report.	

TMDL Implementation Matrix - Bacteria

POLLUTANT: Bacteria, Mercury, and Legacy Pesticides				**City of Molalla: TMDL Implementation Tracking Matrix**			
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 from this source?*	**HOW** *Specifically, how will this be done?*	**FISCAL ANALYSIS** *What is the expected resource need? Are there existing resources budgeted? If not, where will the resources come from?*	**MEASURE** *How will you quantitatively or qualitatively demonstrate successful implementation or completion of this strategy?*	**TIMELINE** *When do you expect it to be completed?*	**MILESTONE** *What intermediate goals do you expect to achieve, and by when, to know progress is being made?*	**STATUS** *Include summary and date.*
Stormwater	Promote Low Impact Development and on-site stormwater treatment.	Encourage green street standards – at least half street improvements with new development. Ordinance for meeting pre-development hydrology.	Currently in Public Works budget.	Percent of green street standards for each project. For each project, stormwater quantity calculations to meet pre-development hydrology and water quality requirements per PW Standards.	On-going	All new development plans incorporate green street standards where practical and include pre-development hydrology.	
Stormwater	Promote Low Impact Development and on-site stormwater treatment.	Incorporate stormwater treatment with transportation projects: e.g. Fenton Ave.	Included in city budget according to capital improvement plan.	Number of stormwater treatment features installed.	2020	Fenton Ave. Project Completion in 2018.	
Stormwater	Promote Low Impact Development and on-site stormwater treatment.	Encourage use of drainage swales that settle, infiltrate, and treat turbid runoff. Current Public Works Design Standards provides design specifications for drainage swales.	Currently in City planning budget for plan review.	Track number of projects that incorporate drainage swales.	On-going	Add drainage swales installed to GIS Stormwater map by end of 2020.	
Stormwater	Reduce pet waste in stormwater runoff.	Install waste bags in parks and common dog-walking locations. Citizen education about improper pet waste management.	Currently in Parks budget.	Number of citizen complaints. Track refill need at bag holders .	On-going	Report complaint number and bag use in annual report to DEQ.	

TMDL Implementation Matrix - Bacteria

Stormwater	Educate developers and the public about stormwater and hydrology in the City of Molalla.	Make Stormwater Master Plan available to public via City website.	None	Number of private development that meet stormwater standards.	On-going	Private development project meet stormwater detention and water quality requirements.	
Stormwater	Prevent erosion from construction sites.	Conduct inspections to address erosion control on sites <1 acre; enforce grading permits.	Currently in Public Works budget.	Percent of sites that comply voluntarily.	On-going	All development meet erosion control requirements.	
Stormwater	Prevent erosion from construction sites.	Cooperate with DEQ to enforce erosion control through 1200C permits.	Currently in Public Works budget.	Keep track of 1200C permits within City boundaries.	On-going	Report number of 1200C permits in annual report to DEQ.	
Stormwater	Reduce runoff and sediment load from impervious areas: roads, vacant lots.	Maintain weekly street sweeping schedule.	Currently in Public Works budget.	Using street sweeping log, track frequency of areas cleaned.	On-going	Report volume estimate of street sweepings in annual report to DEQ.	
Stormwater	Maintenance Program for stormwater collection system.	Maintain storm system components including; catch basins, manholes and pipes.	Currently in Public Works budget. System Development Charges in place for storm drainage system.	Track maintenance projects that improve stormwater system. Construct Decant Facility as funding allows.	On-going	Indicate number of maintenance projects in annual TMDL review.	
Stormwater	City Council overview and acknowledgement.	Review TMDL Plan, annual reports and five year review with City Council.	None	Track number of times TMDL reports are covered in City Council meeting minutes.	On-going	Staff review of approved TMDL Plans with City Council.	

TMDL Implementation Matrix - Bacteria

Lack of riparian vegetation; eroding streambanks	Restore riparian vegetation and streambanks.	Implement Phase 1 of Bear Creek Greenway Project. Approximately 7,500 LF of 8-10' wide pathway through private industrial and residential lands.	$480,000	Completion of trail from Molalla Forest Rd. to Molalla city limits.	5-15 years	Annual review of budget for possible implementation or private development.	
Lack of riparian vegetation; eroding streambanks	Restore riparian vegetation and streambanks.	Partner with watershed groups on riparian restoration/enhancement projects.	Staffing to conduct effort; 0.10 FTE currently funded; volunteer contributions.	Number of projects/efforts completed in partnership with watershed groups.	5 years	Contribute to at least one project by end of 2020.	
Lack of riparian vegetation; eroding streambanks	Protect and enhance existing vegetation in riparian areas.	Enforce code for new development: 50 ft. riparian and wetland setback and protect native vegetation.	Code enforcement staffing; 0.25 FTE is currently funded.	Track enforcement actions/violations.	On-going; code adopted	Retain existing riparian vegetation in developments planned through 2020.	
Cross connections of storm and sanitary sewers	Increase effectiveness and efficiency of wastewater treatment.	Eliminate illicit discharge and infiltration issues in downtown core.	To be determined.	Average daily flow to treatment plant before and after cross connect issues addressed.	5 years	Complete Wastewater Facilities Plan in 2018. Report completion in annual report to DEQ.	
Cross connections of storm and sanitary sewers	Decommission Septic Systems.	Administer 30 day notice to connect to city sewer where feasible.	Planning staff, full time.	Number new connections made annually as a result of annexations, violations discovered.	On-going	Connect all residential, commercial, industrial properties within city limits to city sewer.	
Illegal Discharge	Porta potties at parks in summer with no facilities and public events.	Porta potties provided for public use in parks and areas with no public facilities.	Currently in City budget for City funded events.	Track number of porta potties used for events.	On-going	Report number of City funded events requiring porta potties.	
Illegal Discharge	Code enforcement	Provide code enforcement form to citizens.	Currently in City budget for Operations Supervisor.	Track number of complaints.	On-going	Code enforcement form has been made available on the City of Molalla website.	

City of Molalla – Administration Office
117 N Molalla Avenue, PO Box 248, Molalla, Oregon 97038
Phone: (503) 829-6855 Fax: (503) 829-3676

MEMORANDUM

DATE: March 14, 2018

TO: Mayor and Council

FROM: Dan Huff, City Manager

SUBJECT: **Buckeroo Parking Agreement – Bohlander Field**

Included with this memo is a draft parking proceeds agreement regarding the Molalla Buckeroo Association, Molalla Rotary Club and the City of Molalla. The purpose of the original agreement signed in 2011 was to identify and distribute parking proceeds for events held at the Buckeroo grounds. As all three entities have moved forward from the original agreement we need to revisit and amend agreement language to reflect today's situation. City Staff met with Buckeroo and Rotary representatives to discuss the agreement and proposed similar language as you see in the attached draft.

The original the agreement included three (3) items that have changed as follows:

- 17 + acres of property was identified. Today, after the property exchange between the City and the Buckeroo Association contains only 14 acres.
- The City was required to complete the Parks and Recreation Master Plan. That Plan was completed and adopted by reference into the Comprehensive Plan in 2014.
- I believe there was a mistaken assumption that a windfall of money would be exchanged. In reality that has not been the case.

The main change for the City proposed in this agreement is the distribution of the City's share of the proceeds. The proposed agreement calls for the City of Molalla to redistribute our proceeds back into parking and pedestrian safety improvements in the Buckeroo area. As proposed, the agreement represents a very collaborative process to find a good solution for all parties involved.

Council is not being asked to approve the agreement tonight. However, a thorough discussion and direction to Staff is required.

Dan Huff
City Manager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