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# TMDL Implementation Plan 2018-2023

City of Sweet Home, Linn County, Oregon
Receiving Waters: Ames Creek, Wiley Creek, South Santiam River

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## Introduction

This TMDL Implementation Plan documents the City's planned strategies to reduce stormwater pollution from Temperature, Bacteria, and Mercury in accordance with Oregon DEQ requirements. Strategies are given for each contaminant with the following details:

| | |
|---|---|
| Source: | *What sources of this pollutant are under your jurisdiction?* |
| Strategy: | *What is being done, or what will you do to reduce and/or control pollution emanating from this source?* |
| How: | *Specifically, how will this be done?* |
| Measure: | *How will you demonstrate successful implementation or completion of this strategy?* |
| Timeline: | *When will the strategy begin? Be completed?* |
| Benchmark: | *What intermediate goals will be achieved, and by when, to know progress is being made?* |
| Funding: | *How will the strategy be funded?* |

## 1.0 Strategies for reducing Temperature Pollution

"In both urban and rural areas, increased solar radiation can result from removal of riparian (streamside) vegetation which reduces the amount of shade over the water and increases stream temperature." (source: Oregon DEQ Pollution Control Tools and Programs)

### 1.1 Temperature Source: Solar radiation input

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|---|---|
| Strategy: | Protect existing riparian vegetation on private properties. |
| How: | Enforce riparian protection overlay and protection requirements in City of Sweet Home Development Code. |
| Measure: | Track and document number of building permits, violations, and variances in protected areas. Track acres of protected area lost to approved variances. As of 2018 there have been no requested variances to SHMC 17.72.) |
| Timeline: | Ongoing; annual review |
| Benchmark: | Strategy is in effect & ongoing. |
| Funding: | Community & Economic Development Department |

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|---|---|
| Strategy: | Promote voluntary actions for protection and restoration of privately owned river front properties. |
| How: | Use GIS to identify properties that visually lack native riparian vegetation and target those areas for outreach. Identify projects within the City that would be of interest to the South Santiam Watershed Council (SSWC). Reach out to SSWC to re-establish/enhance atrophied business relationships and connect SSWC with property owners where restoration would be beneficial. Work with SSWC and/ or other conservation organization to identify a collaborative projects. Comprehensive Plan Chapter 7, Policy #12, pg. 48. Distribute an informational brochure that provides information on the City's code requirements for development in riparian areas with development permits |
| Measure: | Provide property owners with SSWC information and natural resources code requirements with development permits. Track the number of restoration project proposals submitted. Document number of restoration projects with SSWC and landowners. |
| Timeline: | Be involved with and provide support for at least one riparian project by 2023. |
| Benchmark: | Year 1: Meet with WSC to identify potential projects; prioritize project list and identify how City may be able to support or facilitate priority project(s).<br>Year 2: Determine funding needs for project(s) and identify funding sources; may include applying for a grant<br>Years 3-5: Implement project |
| Funding: | Community & Economic Development Department |

Strategy: Develop and implement a riparian vegetation plan for Sankey Park.
How: Develop a plan of priority projects that takes into account protection of riparian vegetation, public access and enjoyment of natural resources in the park, and safety concerns of Police and Code Enforcement.
Measure: Develop a riparian maintenance plan. Restore native riparian vegetation by removing invasive species (esp. blackberries) and replanting native vegetation. Track labor hours to restore and maintain riparian areas. Track area of treatment (sq ft or acres). Document outreach and coordination with SSWC youth watershed group and the high school to utilize student volunteers/class projects for planting & maintenance projects.
Timeline: Initiated in 2018; ongoing
Year 1-2: Develop priority list of projects sites and timeline for implementation.
Years 3-5: Implement priority restoration projects.
Benchmark: 2018-19 Identify existing plant species on Ames Creek through Sankey Park so we can identify & prioritize areas needing restoration. Collaborate interdepartmentally to develop a riparian maintenance plan.
Annual maintenance of restored riparian areas at City parks.
Funding: Community & Economic Development Department and Parks fund

### 1.2 Temperature Source: Wastewater Treatment Plant Discharge

Strategy: Maintain effluent low temperatures.
How: Maintain compliance with NPDS permit #101657 requirements.
Measure: Monitor effluent and river temperatures as a condition of the DEQ discharge permit.
Timeline: Ongoing.
Benchmark: Provide documentation showing that effluent complies with permitted limits.
Funding: Wastewater Enterprise fund.

## 2.0 Strategies for reducing Bacteria Pollution

"Sources of bacteria include discharges of untreated or poorly treated sewage resulting from malfunctions or overflows, and runoff that carries feces from pets or wildlife." (source: Oregon DEQ Pollution Control Tools and Programs)

### 2.1 Bacteria Source: Wastewater Treatment Plant Discharge

Strategy: Maintain effluent low bacteria levels.
How: Maintain compliance with NPDES permit #101657 requirements.
Measure: Monitor effluent bacteria levels as a condition of DEQ discharge permit.
Timeline: Monitoring in progress & ongoing. WWTP capacity improvement engineering began 2018; construction anticipated 2020-2022.
Benchmark: Provide documentation showing that effluent complies with permitted limits.

WWTP scheduled for capacity improvement project.

Funding: Wastewater Enterprise fund.

**2.2 Bacteria Source: Sediments entering City stormwater collection system**

Strategy: Gauge public perception of stormwater issues and raise awareness of actions that individuals can take to minimize stormwater impacts.

How: Publish educational materials in the local newspaper and City publications. Update website and/or Facebook page with information or links related to protection of surface water and drinking water, photos of volunteers, etc. Send informational inserts with water bills. Invite the public to share their opinions on stormwater issues using a variety of data gathering methods to reach multiple demographics. Use public opinion results to strategize educational efforts.

Measure: Track publication of educational materials.

Timeline: Gauge public perception of stormwater issues every 5 years beginning 2020.
Update or re-evaluate website content annually.
Add educational materials to Facebook page and bill mailing inserts, annually.
Identify newsworthy information for publication in local newspaper, ongoing as opportunities arise.

Benchmark: 2019 Begin adding educational materials to City website and Facebook page.
Establish internal procedure for sending bill inserts.
2020 Develop a locally appropriate method to gauge public perception across multiple demographics and implement it.

Funding: Stormwater fund

Strategy: Install pet waste stations.

How: Install pet waste bag stations in City parks.

Measure: Complete installation and document use of bags.

Timeline: Installation 2019. Maintenance of bag stations to be ongoing.

Benchmark: Purchase and install bag stations.

Funding: Parks and Stormwater funds

Strategy: Install “This drain goes to stream” catch basin stickers.

How: Install “This drain goes to stream” stickers on about 450 remaining unmarked City catch basins. About 450 stickers were installed previously and many have gone missing or been damaged. Begin maintenance program to replace damaged/lost stickers by incorporating it with the catch basin inspection & maintenance. Coordinate volunteer efforts to install new stickers with local groups such as SSWC youth watershed group, Scouts, etc.

Measure: Approximately 100-200 stickers installed per year until all catch basins are marked and then maintain as needed for replacement.

Timeline: Incorporate sticker maintenance with catch basin inspection beginning 2019.
Target completion for installation is 2024.

Benchmark: Establish annual sticker maintenance in conjunction with catch basin inspection & maintenance.
Contact local groups such as SSWC, Scouts, etc. that may be interested in volunteer project to install new stickers.
Funding: Stormwater fund

Strategy: Cleaning streets and drainage collection systems.
How: Maintain a budget and a schedule for street and catch basin cleaning. Perform ditch cleaning, catch basin cleaning, and street sweeping.
Catch basin inspections target is biennial. Ditch cleaning is as needed.
Street sweeping target is once per month in residential areas and once per week in business core.
Measure: Track miles swept, feet of ditch cleaned, and number of catch basins cleaned.
Timeline: Ongoing annually.
Benchmark: Continue sweeping & cleaning programs. Construct new paved dumpsite at Public Works facility in 2020.
Funding: Streets and Stormwater funds

Strategy: Fall leaf collection program.
How: Curbside collection of customer leaf piles in right-of-way on specified schedule.
Measure: Track annual loads/yards of leaves collected through the season.
Timeline: Begin 2018. To be ongoing annually.
Benchmark: 2018 Begin new program. Educate public on proper location of leaf piles. Program is by call-in appointment.
2019 Develop routes and maps, educate public on collection schedule.
Funding: Streets, Parks, and Stormwater funds.

## 3.0 Strategies for reducing Mercury Pollution

"Mercury is a potent neurotoxin that can cause damage to the brain and nervous system. Primary sources of mercury in the Willamette Basin are associated with nonpoint sources, namely the erosion of soils containing mercury and runoff from atmospherically-deposited mercury." (source: Oregon DEQ Pollution Control Tools and Programs)

### 3.1 Mercury Source: Sediments entering City stormwater collection system

Strategy: Decrease sedimentation and erosion from construction and new and re-development.
How: Work with Building Program and developers to ensure erosion control. Erosion control permit inspection & enforcement on impacted areas of 10,000 sf or more as per SHMC 13.06.030.
Include erosion control fact sheet in permit application packets for commercial and large residential projects.

Encourage developers to use Low Impact Development (LID) for stormwater infiltration and erosion control; eg. grassy swales, etc.
Require developers to provide confirmation of 1200-C permit for projects over 1 acre prior to issuing development permits.

Measure: Number of City erosion control permits issued under SHMC 13.06.030 and number of inspections/enforcement actions.
Number of 1200-C permits confirmed.
Building permit packets to include an erosion control fact sheet.

Timeline: Erosion control permits & construction inspections are in place. Fact sheet and LID information on City website to be included beginning 2019.

Benchmark: Find or create a locally appropriate erosion control fact sheet. Include it in building permit packet and post it to the City website.
Promote LID on City website & refer developers to website.

Funding: Community & Economic Development Department and Public Works

Strategy: Update development standards to protect water quality

How: Update the City's Stormwater Master Plan (SWMP) and City codes to include water quality protection considerations and priorities. Update & modernize stormwater detention standard for development/redevelopment projects including clarifying the definition of qualifying projects and the design storm to be used.

Measure: City Council adopts updated SWMP. City Council adopts updated municipal codes.

Timeline: 2020 begin audit, 2023 adopt new plan & codes.

Benchmark: 2020 Audit stormwater code for necessary updates. 2021-2022 Retain a consultant to assist with code and SWMP updates. Evaluate DEQ's offered "Template for LID Stormwater Manual for Western Oregon" for local use. Review example codes and draft proposal language based on internal review and public comment.
2023 City Council adopts revised codes after public process. Conduct public outreach/education about new codes.

Funding: Funding will be needed to retain a consultant for the Stormwater Master Plan update. City code update may also require funding for a consultant if staff resources prove insufficient.

Strategy: See above strategy for Bacteria: Gauge public perception of stormwater issues and raise awareness of actions that individuals can take to minimize stormwater impacts.

Strategy: See above strategy for Bacteria: Cleaning streets and drainage collection systems.

## 4.0 Strategies for all pollutants

Strategy: Staff training on routine maintenance activities to protect water quality.
How: Conduct annual staff training on stormwater protection as it relates to Public Works field activities such as dechlorinating water flushed from hydrants, vehicle maintenance, what to do if they find an illicit discharge, etc.
Measure: Record training dates and topics.
Timeline: 2020 Incorporate stormwater into training topics rotation and conduct annually.
Benchmark: 2019 Develop stormwater training session content relevant to Public Works activities.
Funding: Public Works

Strategy: City Council update of TMDL Program. Implementation Plan and annual report or five year review are presented to Council at least annually.
How: Present 5-year Implementation Plan or Annual Report to City Council annually.
Measure: City Council meeting minutes document presentation.
Timeline: Begin 2019 and continue annually.
Benchmark: Set up a recurring Council agenda item/reminder to present TMDL Plan or Report each year.
Funding: Administration and Public Works

Strategy: Investigate and resolve illicit discharges.
How: Respond to call-in reports from citizens. Inspect for illicit substances during catch basin inspections. Follow up on suspected violations with site visits and property owner contact as needed.
Measure: Track number of illicit discharge complaints, follow-up actions/ investigations. Update city code to address discharge violations as part of previous strategy "Update Stormwater Master Plan and City codes to protect water quality."
Timeline: Reports of illicit discharges are investigated upon receipt. Update code by 2023.
Benchmark: On catch basin work order form add a comment line for illicit substance notes. Additional benchmarks same as previous strategy "Update Stormwater Master Plan and City codes to protect water quality."
Funding: Stormwater fund

Strategy: Maintain up-to-date stormwater system map.
How: Use GIS or other software/ program to publish a stormwater system map that can be updated as needed.
Measure: Completion of updated system map.
Timeline: Ongoing.
Benchmark: Updated Map.
Funding: Stormwater fund