



## **TMDL Implementation Plan 2018-2023: Annual Report for 2019**

City of Sweet Home, Linn County, Oregon

Receiving Waters: Ames Creek, Wiley Creek, South Santiam River

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### **Introduction**

The purpose of this report is to update DEQ on progress the City made on the strategies identified in our TMDL Implementation Plan during the May 1, 2019 – April 30, 2020 reporting period. The following pages are taken directly from our TMDL Implementation Plan 2018-2023 with a description of the current status added to each strategy.

The Community & Economic Development Department (CEDD) and the Public Works Department (PW) jointly implement the City’s TMDL strategies. 2019 was another challenging year for the City’s stormwater program. In 2018 staff capacity was identified as the limiting factor to implementing many projects and a 1.0 FTE position was added to the 2019-20 budget to alleviate the bottleneck. However, prior to filling the position, unfavorable budget forecasts (even predating the COVID-19 pandemic) forced us to eliminate the position. Consequently, staff in both CEDD and PW have had to reprioritize and defer many projects. Despite these challenges we were able to make progress on certain benchmarks as described in this report. We successfully maintained a consistent level of service, and we procured consultant services to add capacity on certain projects.

Looking ahead to 2020-2021, it appears that some of our implementation timelines were overly ambitious. There are no additional staff planned and there is a known workload increase coming when the Wastewater Treatment Plant capacity upgrade project goes into construction. The City has also implemented a spending freeze on all non-mandatory purchases in preparation for anticipated COVID-19-related revenue shortfalls. Therefore we have revised timelines to reflect what we think is possible.

## **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**

<b>Strategy:</b>	Protect existing riparian vegetation on private properties.
<b>How:</b>	Enforce riparian protection overlay and protection requirements in City of Sweet Home Development Code.
<b>Measure:</b>	Track and document number of building permits, violations, and variances in protected areas. Track acres of protected area lost to approved variances.
<b>Timeline:</b>	Ongoing; annual review
<b>Benchmark:</b>	Strategy is in effect & ongoing.
<b>Funding:</b>	Community & Economic Development Department
<b>Status:</b>	There was one building permit issued in the riparian zone in 2019. It had an approved variance from the riparian setback in 2018. The variance and permit allowed the applicant to build on top of an existing concrete slab in the riparian zone which was leftover from a previous structure and which predated annexation to the City. No riparian area was lost.
<b>Strategy:</b>	Promote voluntary actions for protection and restoration of privately owned river front properties.
<b>How:</b>	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 project. 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.
<b>Measure:</b>	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~~ 2025.

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).  
Year 2: Determine funding needs for project(s) and identify funding sources; may include applying for a grant  
Years 3-5: Implement project

Funding: Community & Economic Development Department

Status: CEDD provides the riparian code with the building permit packet as needed. CEDD staff are in contact with WSC staff however due to City workload we were not able to prioritize this strategy during the reporting period. The timeline has been revised. However, the WSC has performed volunteer projects of their own within City Limits and we will continue to facilitate WSC-initiated volunteer projects as requested.

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~~ 2021-22 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

Status: The riparian vegetation management plan has been deferred because CEDD is working on an updated wetland delineation for Sankey Park. The timeline has been revised.  
PW Maintenance spent approximately 30 labor hours maintaining 50,000 sf of Ames Creek riparian area at Sankey Park (1000 linear feet along creek) which had invasive species removed in 2018.

## 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.  
Status: The City's wastewater effluent temperature complies with our NPDES permit.

## **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.  
Status: The City's wastewater effluent bacteria level complies with our NPDES permit. The WWTP Upgrade Project schematic design was completed in February 2019 and is in final design. Final design is approaching the 60% benchmark. Construction is anticipated in 2021-2023 and will increase staff workload by at least 0.5 FTE. Due to budget constraints there are currently no plans to hire additional staff, so this is a major reason for revising other timelines throughout this report.

### **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~~ 2023.  
 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~~ 2020 Begin adding educational materials to City website and Facebook page. Establish internal procedure for sending bill inserts.  
~~2020~~ 2023 Develop a locally appropriate method to gauge public perception across multiple demographics and implement it.

Funding: Stormwater fund

Status: In 2019 the City created and filled a new Communications Specialist position. This new staff will be instrumental in implementing this strategy. We believe we can achieve the informational materials updates on the City website and Facebook page, however the public opinion assessment will be much more labor intensive, so the timelines have been revised according to anticipated staff capacity.

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

Status: PW installed six pet waste stations in 2019, one each at six City parks.  
 Approximately 1,600 pet waste bags were used during the reporting period.

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

Status: PW maintenance staff discussed internally & agreed to incorporate sticker installation & replacement with the routine catch basin inspection & maintenance. The catch basin maintenance program was severely limited in 2019 due to a staff vacancy and no new stickers were installed. The vacancy was filled in February 2020 and we anticipate being able to install & maintain stickers as planned in 2020.

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

Status: We swept approximately 3400 miles.

We cleaned approximately 9000 ft of ditches.

We inspected 30 and/or cleaned approximately 60 catch basins. The catch basin maintenance program was severely limited in 2019 due to a staff vacancy. The position was filled in February 2020 and the program has returned to the usual schedule.

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.

Status: This was the second year of the fall leaf collection program. Public reception continued to be very positive. There were 347 leaf collection visits and 1450 cubic yards of leaves collected, a 14% increase over 2018. We will continue running the program on a call-in basis since it's working so well, instead of developing routes.

### **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~~ 2020-21.
- 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
- Status:** There was one erosion control permit for development over 10,000 sf and one erosion control inspection.  
Due to staff workload we were unable to create an erosion control fact sheet in 2019 as planned. Rescheduled to 2020-2021.
- 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.

**Status:** We proposed a stormwater user fee increase from \$1/month to \$3/month to fund a stormwater master plan update and a stormwater capital project. City Council considered the proposal in public meetings on 5/14/19, 5/28/19, 6/11/19, 7/16/19, and 7/26/19, and ultimately came to a consensus that Council was not in favor of a stormwater user fee increase at that time.

We also retained a consultant Engineer of Record to increase the City's project team capacity. In discussions with the consultant about project prioritization, it was determined that an SDC fee update is more urgently needed than a stormwater code or master plan update, to increase revenue for stormwater projects. Our SDC fees were last updated in 2005 and do not currently include a stormwater SDC. The SDC update project is in progress and includes a new stormwater SDC. Completion is anticipated in 2020.

**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

**Status:** Public Works conducted staff training on waterway spills on January 20, 2020 following an incident where a citizen's vehicle went into Ames Creek. Topics covered included spill response procedures, equipment, and notice phone numbers.

**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

**Status:** The TMDL Implementation Plan 2018-2023 was presented to, and adopted by, City Council on March 26, 2019. We missed presenting the 2018 annual report during the May 1 - April 30 reporting period, so instead we presented the draft of this 2019 annual report at the May 26, 2020 City Council meeting.

**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

**Status:** There were no illicit discharge complaints in 2019. While not an illicit discharge per se, we are pleased to report that we identified and stopped a major water leak (estimated 340,000 gallons per day) that was discharging into Cotton Creek (a tributary of Ames Creek). This is about 1/3 of the City's average daily water production. The repair project not only stopped chlorinating the creek and restored it to its natural seasonal flows, but it has also significantly reduced our water intake volume from the South Santiam River. The project was completed on April 16, 2020.

**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

**Status:** Updates to the stormwater map have been made to correct spatial inaccuracies and add missing features, ongoing as discovered.