

APPENDIX A--

2018 TMDL Implementation Tracking Matrix: Independence, Oregon

Independence has legal authority over land use on 1,738 acres within the City's limits. The Willamette River runs 3.6 miles through length of the City.

	POLLUTANT	SOURCE	STRATEGY	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS	ASSIGNED TO	DATE DUE
	What pollutants does the TMDL address?	What sources of this pollutant are under your jurisdiction?	What is being done, or what will you do, to reduce and/or control pollution from this source?	Specifically, how will this be done?	What is the expected resource need? Are there existing resources budgeted? If not, where will the resources come from?	How will you demonstrate successful implementation or completion of this strategy?	When do you expect the strategy to be completed?	What intermediate goals do you expect to achieve, and by when, to know progress is being made?	Include summary and date.		
Task #1	Temperature	Solar radiation input	Protect and enhance existing shading vegetation	Development code (Subchapter 54) contains riparian setback requirements for Ash Creek. This setback requirement will be extended to named and unnamed perennial tributaries to Ash Creek	City staff and City consultant time for engineering and planning efforts to provide information to the City Council to achieve implementation of this rule change	Prepare maps of affected areas, determine costs and other potential impacts to landowners. Prepare agenda packet with rule change language for Council consideration.	Complete and Implemented by Apr 2022 if City Council approves implementation	Prepare support material and conduct first reading of ordinance revision by September 2021.	Materials under development	City Engineer/PW Director/Planning	5/1/2022
Task #2	Temperature	Solar radiation input	Protect and enhance existing shading vegetation	Provide support and recommendations for riparian tree planting projects designed to provide shading for the purpose of reducing surface water temperature.	Resources are not available to initiate additional tree planting projects. City will continue to encourage sponsoring groups to undertake tree planting projects and will assist to the extent possible when projects are proposed. Propose \$2500. budget.	Report on any projects undertaken in the annual reports.	Take them as they come.	Respond and assist in any new projects designed to reduce surface water temperature.	Awaiting proposals	Engineerr Tech Support/ City TMDL Coordinator	Project Driven
Task #3	Temperature	Solar radiation input	Protect and enhance existing shading vegetation	Provide information and links on City Website that demonstrate the connection between shading of water courses and temperature.	No resourses are currently budgeted for this task. Efforts will be made to budget this item in the future under a general category of Willamette TMDL.	This information placed on the City Website.	Complete by Apr 2021	Create and obtain approval of budget category for Willamette TMDL for 2020 budget cycle.	Funding dependent	Engineerr Tech Support/ City TMDL Coordinator	10/1/2021
Task #4	Temperature	Solar radiation input	Protect and enhance existing shading vegetation	Incorporate riparian shade or tree planting along existing and with construction of additional segments of the Ash Creek Trail.	Stormwater Utility Funds/grant	Designate planting areas, specify tree types and planting methods (eg root guards to protect trail, irrigation requirements, etc.) and plant trees.	Start July 1, 2019	Trail segments completed with associated riparian shading.	Funding dependent. Will incorporat riparian shading in all new trail segment development and construction.	Planning/ PW Director	10/1/2023
Task #5	Temperature	Solar radiation input	Work with Luckiamute Watershed Council in efforts to implement temperature reduction measures	Increase participation in LWC activities.	Approximately 40 hrs of staff time needed anually.	Report on meetings attended and support provided in annual report.	Begin January 2020 if resources approved	Become member of LWC. Attend at least 6 meetings anually.	Funding dependent	City TMDL Coordinator	1/1/2020
Task #6	Temperature	Solar radiation input	Work with Luckiamute Watershed Council in efforts to implement temperature reduction measures	Provide fiscal support for LWC to maintain staffing to work on temperature reduction strategies.	Considering funding level of \$2500 anually. To be budgeted under TMDL category if approved	Funds will have been appropriated and distributed.	Begin January 2020 if resources approved	Create and obtain approval of budget category for Willamette TMDL for 2020 budget cycle.	Funding dependent	City TMDL Coordinator/PW Director	10/1/2020
Task #7	Bacteria and Mercury	Pet and animal waste	Reduce amount of pet and other domestic animal waste that is not disposed of properly.	Continue pet waste bag program	Efforts will be made to budget this item in the future under a general category of Willamette TMDL	Maintain at least fifteen pet waste stations.	Pet waste stations are ongoing.	Pet waste stations are existing.	Ongoing - 13 stations currently in use	City TMDL Coordinator/PW Staff	Ongoing

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Task #8	Bacteria and Mercury	Pet and animal waste	Reduce amount of pet and other domestic animal waste that is not disposed of properly.	Educate public about pet housing and domestic livestock area maintenance and waste management	Efforts will be made to budget this item in the future under a general category of Willamette TMDL	Provide information about confined pet and domestic animal waste management posted on City's website and at front counter.	Information about confined pet and domestic livestock will be developed, posted and distributed by Apr 2020.	Information posted to City Website. Fact sheets for distribution at City Hall front counter	Funding dependent	Engineerr Tech Support/ City TMDL Coordinator	10/1/2020
Task #9	Bacteria and Mercury	Bacteria and mercury carried to waterways in storm runoff	Treat new development stormwater before discharge	Stormwater Management Plan (City Code Subchapter 55) requires prevention to adverse downstream impacts	Storm Utility Funds/minimal staff time	Report number of storm water treatment devices constructed as part of new development anually.	Initiate FY 2019	Storm water treatment devices constructed at new developments.		City Engineer/PW Director/Planning	Initiate 01/01/2019
Task #10	Bacteria and Mercury	Bacteria and mercury carried to waterways in storm runoff	Reduce stormwater runoff from new development	Stormwater Management Plan (City Code Subchapter 55) requires prevention to adverse downstream water flows	Staff time/minimal resources needed	Report number of storm water infiltration mechanisms constructed as part of new development anually.	Initiate FY 2019	Storm water infiltration mechanisms constructed at new developments, where appropriate.	Initiate FY 2019	City Engineer/PW Director/Planning	Initiate 01/01/2019
Task #11	Bacteria and Mercury	Bacteria and mercury carried to waterways in storm runoff	Augment Stormwater Management Plan with map of the City Storm Water System.	Create stormwater system map .	Efforts will be made to budget this item in the future under a general category of Willamette TMDL	Map produced and used for bacteria monitoring and other future planning efforts	Complete by Apr 2022 if resources approved.	Map Complete.	Funding dependent	City Engineer/PW Director	10/1/2022
Task #12	Bacteria and Mercury	Bacteria and mercury carried to waterways in storm runoff	Prevent dumping into storm drainand educate school age children about storm water stewardship.	Incorporate storm drain marking into school science ciriculum and have students place the markers.	Efforts will be made to budget this item in the future under a general category of Willamette TMDL	Number of school programs developed and markers installed.	Continue existing marker program. Develop educational piece by Apr 2022 if resources approved.	Markers placed. Educational program initiated.	Marker program ongoing. Educational program funding dependent	City TMDL Coordinator	10/1/2022
Task #13	Bacteria and Mercury	Natural background in soil and rock	Reduce soil erosion	Develop a grading permit required for soil disturbance greater than 10,000 sq-ft or 50 cu-yds that contains links to and requires implementation of approved storm water BMPs. Per appendix J of the VBC	Efforts will be made to budget this item in the future under a general category of Willamette TMDL	Number of grading permits issued anually	Complete by Apr 2022 if resources approved.	Permit Program Implemented	Funding dependent	City Engineer/PW Director	10/1/2022
Task #14	Bacteria and Mercury	Natural background in soil and rock	Reduce soil erosion	Inform developers of requirement to obtain 1200-C permits for new developments over 1 acre	Staff time	Demonstrate that 100% of new developments over one acre obtain 1200-C permits	Ongoing	Provide materials explaining 1200-C requirements and make available with development applications	Ongoing,	Planning/ PW Director	Ongoing
Task #15	Bacteria and Mercury	Mercury containing hazardous waste	Prevent soil and stormwater runoff contamination from litter and household hazardous waste	Cooperate with Ash Creek Water Control District to provide trash containers at key locations along Ash Creek.	Staff time.	Continue cooperative trash collection program with ACWCD.	Ongoing	Continue cooperative trash collection program with ACWCD.	Ongoing.	City TMDL Coordinator	Ongoing
Task #16	Bacteria and Mercury	General public nonpoint source	Prevent soil and stormwater runoff contamination from litter and household hazardous waste	Promote County Hazardous Waste collection event through City Web Site, media and events.	Staff time	Report annually on promotional efforts and number of events where information provided.	Begin January 2020 if resources approved	Coordinate with Polk County on planned hazardous waste collection events.	Annual Hazardous waste clean up program on-going.	City TMDL Coordinator	10/1/2020

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Task #17	Bacteria and Mercury	General public nonpoint source	Reduce potential stormwater contamination resulting from illicit discharges to the storm water system	Attend sponsored IDDE training events. Implement an IDDE Program	Efforts will be made to budget this item in the future under a general category of Willamette TMDL	Report progress on funding and implementation of IDDE Program	Begin January 2020 if resources approved	Training Records and IDDE program implemented	Funding dependent	Engineerr Tech Support/ City TMDL Coordinator	1/1/2020
Task #18	Bacteria and Mercury	Natural background in leaf litter and in soil	Collect and remove leaves and yard debris in order to prevent it from entering and/or plugging the storm drain systems.	Maintain leaf collection program	Staff time and equipment operation and maintenance	Program operated as proposed (see fact sheet)	Ongoing	Program implemented anually, notice posted on-line and available at PWs front counter	Ongoing	City TMDL Coordinator/PW Director	Ongoing
Task #19	Bacteria and Mercury	Wastewater treatment plant discharge	Maintain low mercury levels in WWTP effluent.	Enforce sewer use ordinance prohibiting mercury discharge. Treatment and monitoring in compliance with NPDES permit requirements.	Sewer Operations and Maintenance Funds	Monitor mercury levels as condition of NPDES permit. Annual (January) grab sample.	On-going	Response to any indication that increases in mercury concentrations have occurred	No indication of increased mercury concentration in wastewater effluent.	PW Director/ WWTF Staff	Ongoing
Task #20	Temperature, Bacteria and Mercury	Wastewater treatment plant discharge	City planned water reuse project will allow for crop irrigation with effluent that is currently discharged to the Willamette River. This will reduce bacteria and mercury impacts related to the discharge.	This will be completed through coordination with DEQ for permitting and SRF loans. Will require approvals by the City Council and local support.	Will require local bond measure and State SRF Loan.	Water reuse facility constructed and operational.	Complete by Apr 2023 if approved and funded	Approval by DEQ and City Council by May 2020	Approval by DEQ and City Council by May 2020	PW Director/Cosulting Engineer	10/1/2023
Task #21	Temperature, Bacteria and Mercury	Land Development	Encourage Low Impact Development	This is an ongoing effort to facilitate and incentivize projects that incorporate LID features.	Staff time/minimal resources needed	Development projects incorporating LID features completed	On-going	Report number and type of LID features incorporated into development projects in annual report	Begin Reporting 2019 report	Planning/ PW Director	Ongoing
Task #22	Temperature, Bacteria and Mercury	Solar radiation input, bacteria and mercury carried to waterways in storm runoff	Provide shading in riparian area and restore riparian area to trap sediments.	Provide fiscal support for Inspiration Garden Project (Polk County Master Gardeners	Considering funding level of \$2500 anually. To be budgeted under TMDL category if approved	Funds will have been appropriated and distributed.	Begin January 2020 if resources approved	Create and obtain approval of budget category for Willamette TMDL for 2020 budget cycle.	Funding dependent	City TMDL Coordinator/PW Director	1/1/2020