

**City of Dallas, OR**

**TMDL 5<sup>th</sup> YEAR EVALUATION AND ASSESSMENT**



### Certification

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*



Gary B. Marks  
City of Dallas, Public Works Director  
187 SE Court Street  
Dallas, OR 97338

## Table of Contents

1.0 Purpose	1
1.1 Introduction	1
2.0 Program Overview	2
2.1 Description of 5 Year Activities	2
2.2 Program Strengths	3
2.3 Program Weaknesses	4
2.4 Program Modifications	4
3.0 Final Comments	5

APPENDIX A – 2018-2022 Accomplishments

APPENDIX B – BMP Revisions in 2022

APPENDIX C – 5<sup>th</sup> Year Matrix

## ACRONYMS

BMPs	Best Management Practices
City	City of Dallas
CESCL	Certified Erosion and Sediment Control Lead
CS	Construction Site Runoff
CWA	Clean Water Act
DEQ	(Oregon) Department of Environmental Quality
DMA	Designated Management Agency
ESCP	Erosion and Sediment Control Plan
EPA	United States Environmental Protection Agency
GH	Good Housekeeping in Municipal Operations
IDDE	Illicit Discharge Detection and Elimination
LID	Low Impact Development
LUCS	Land Use Compatibility Statement
LWI	Local Wetland Inventory
MCM	Minimum Control Measure (aka Stormwater Controls)
NPDES	National Pollutant Discharge Elimination System
NPS	Nonpoint Sources (not under an NPDES permit)
NWI	National Wetland Inventory
OAR	Oregon Administrative Rules
ODA	Oregon Department of Agriculture
ODFW	Oregon Department of Fish and Wildlife
PC	Post-Construction Runoff Control in New and Re-development
PE	Public Education
PI	Public Involvement
SWPPP	Stormwater Pollution Prevention Plan
SWMP	Stormwater Management Plan
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
UIC	Underground Injection Control Device
USGS	United States Geological Survey
WQMP	Water Quality Management Plan

## 1.0 Purpose

The City of Dallas was identified as a Designated Management Agency (DMA) in the 2006 *Willamette Basin TMDL and WQMP*. The Water Quality Management Plan (WQMP) states that:

*“Following approval of the TMDL implementation plan, DMAs will be expected to submit to ODEQ an annual status report briefly describing the status of management strategies that implement TMDL pollutant allocations or reductions. Every fifth year DMAs will need to submit an evaluation report. The report will describe the effectiveness of the management strategies identified in the TMDL Implementation Plan and put into place during the preceding four years. The report will indicate whether implementation of their plan is adequately meeting the pollutant reduction goals. If they determine it does not, the report will describe the steps they will take to modify their plan.”*

This document serves as the 5<sup>th</sup> Year Evaluation report referenced in the 2006 Willamette Basin WQMP for the period of **6/15/2018 to 09/30/22**.

## 1.1 Introduction

Correspondence from the City to DEQ, indicates the City of Dallas revised the 2008 TMDL Implementation Plan in 2013 and again in 2018. For the purpose of this evaluation, progress related to ‘Tasks’ is primarily from the 2018 implementation plan. The 2022 revision was developed in order to remedy programmatic shortcomings and to address the 2019 Final Revised Willamette Basin Mercury TMDL and WQMP. As was referenced in the City’s 2022 Implementation Plan, the City had failed at recordkeeping efforts and progress in general.

The following was included as part of the 2021/2022 yearly progress report for Dallas:

*“Recordkeeping and reporting has been problematic for Dallas since initial plan development. As is common with new DMAs, Dallas tried to implement its program using existing staff who have limited work hours and little ability or training to take on new responsibilities. While Dallas staff had every good intention of meeting their goals, falling behind was the ultimate outcome. Updates to the plan in 2018 were insufficient to meet the goals of the overall TMDL program, and the Annual Report submitted for the 2020/2021 clearly demonstrated that. With the issuance of the 2019 Final Revised Willamette Basin TMDL and WQMP, the City was moved to re-evaluate its efforts in regard to program implementation and move forward with a more comprehensive program.”*

Dallas did not maintain comprehensive records over the 5 year evaluation period. Attachment A reflects information retrieved from records from 6/2018 to 9/30/2022. Attachment B is a list of the 2018 Tasks and changes made to the plan in 2022. Appendix C is the 2022 matrix which the City is working from. This matrix will be used for the 2022/2023 yearly report.

## 2.0 Program Overview

The 2018 version of the implementation plan included a list of Tasks that were developed in order to address the 3 pollutants of concern in the Willamette Basin TMDL; mercury, bacteria, and temperature. Although many of the Tasks were established stormwater Best Management Practices (BMPs), the measures, milestones, and timelines were not properly developed and the program lacked an internal review process. As is noted in Section 1.1 of this document, recordkeeping has been the most significant area of weakness for the City of Dallas. As such, the findings in Appendix A do not cover all activities and actions the City was involved in over the review period.

In order to address deficiencies in the plan, the City sought the assistance of a knowledgeable consultant to assist with development of remedies to the program. The result was a revised TMDL Implementation Plan which addressed the Final Mercury TMDL, but also updated the document to meet current program needs as well as current conditions within Dallas. The revised plan was submitted to DEQ in August 2022 and approved by DEQ in May 2023.

### 2.1 Description of 5 Year Activities - 6/15/2018 to 09/30/22

It is worth noting that staff has made good efforts toward BMP implementation over the review period, but existing personnel did not fully understand stormwater programming and principles. There is documentable evidence that staff did attempt to move forward with Tasks listed in the plan. In an effort to alleviate this issue, Dallas has recently hired new personnel that are better equipped to implement new BMPs.

City staff put valuable effort into public education during the evaluation period. Information was available to the public on the City's website. Some educational material was made available for children at public events, and the City utilized their utility billing to educate a broader portion of residents in Dallas.



*Public Works Booth at Crazy Days in August 2022*

Public involvement activities have occurred during the review period in the form of volunteer activities such as ivy removal projects. The City has consistently observed Arbor Day by organizing volunteers for tree planting and invasive plant removal.



*Girl Scout Tree Planting*

The City also arranged to provide notice to City Council members shortly after the revised plan was submitted to DEQ. A PowerPoint presentation was included at a City Council meeting on November 21, 2022.

Training has occurred for municipal staff in regard to good housekeeping practices. There has been some internal confusion about differences between stormwater and wastewater BMPs, but an attempt was made to educate personnel and that training was held consistently. See Good Housekeeping under Section 2.2.

The City actively maintains streets with a street sweeping program and an annual leaf haul in the Fall. The City also annually cleans catch basins, and repairs stormwater facilities.

Dallas did not have significant progress in either construction site runoff or post-construction runoff during the evaluation period.

## **2.2 Program Strengths**

*Staffing* -The City hired additional stormwater funded staff during the summer of 2022. This new position was highly instrumental in program progress during the summer of 2022 and into the last month of the evaluation period. Meetings were held in August and September 2022 with the consultant, primarily for mentoring purposes. To demonstrate progress in this area, a GIS Technician was hired in early 2023 as well.

*Public Education* – Dallas has made a good effort to provide outreach materials to the public during the review period. The website had stormwater related information as well as riparian area and invasive plant information.

Toward the end of the evaluation period the City began to add updated material to the website including the revised implementation plan, and an explanation about the plan and TMDLs. Activities associated with this control measure will be highly positive in the 2022/2023 Yearly Report.

*Public Involvement* – The City posted the Revised TMDL Implementation Plan to the City's website in September 2022. In addition, the website has information available explaining the TMDL program. This progress has continued since the end of the review period which will be covered in the 2022/2023 yearly report.

*Good Housekeeping* – The City has a strong Public Works operations program and has maintained a quality level of service. Staff made solid attempts to provide training for municipal staff in regard to illicit discharge, and water quality minded activities. This control measure will be refined in the next evaluation period.

*Internal Attitude* – The internal attitude toward proper program implementation has improved over time and staff is demonstrating interest in seeing the evolution of a successful TMDL Program.

### **2.3 Program Weaknesses**

*Construction Site Runoff and Post-Construction Programs* – Very little progress has occurred for these control measures over the evaluation period. These deficiencies have been identified and useful BMPs have been added to the revised plan.

*Growing Pains* - The City has done an excellent job of putting elements in place that will make the program successful. Their effort in the period from 2021 to present has been on track. The addition of dedicated personnel has made a recognizable difference. The only identifiable weaknesses in the program can be attributed to the growing pains associated with implementing a revised program.

The 5<sup>th</sup> Year Evaluation process allowed the DMA an opportunity to assess weaknesses in the overall program. In the case of Dallas, the City utilized the activity associated with meeting the new mercury TMDL requirements to identify overall weaknesses in the program. The City has good intentions of meeting obligations as the program moves forward.

### **2.4 Program Modifications**

As has been covered in this evaluation, the revised 2022 implementation plan was in response to the mercury TMDL. The changes to the program were designed to 1) reduce redundancy, 2) include BMPs that are designed to address the pollutants of concern in a useful way, and 3) create BMPs that can be more easily implemented by staff. Because the program was so recently revised, no major modifications are proposed at this time. Minor changes needed to



fine-tune the program may yet become apparent prior to the end of the 2022/2023 Report Year. Any noted deficiencies or programmatic changes will be covered in that report. Minor corrections to the matrix are noted in red.

### **3.0 Final Comments**

The City of Dallas has had some programmatic successes over the evaluation period. Lack of proper recordkeeping has prevented a more detailed accounting of those endeavors. The City understands that recordkeeping is a crucial element to the TMDL program and has taken steps to alleviate the problem. Future reporting by the City will be more comprehensive including numerics and dates documenting activities.

The City of Dallas looks forward to submitting its Yearly Report under this revised plan on December 1, 2023.

## TMDL Implementation Plan 5th Yr Evaluation 2018-2022

## APPENDIX A

## BMP Implementation 2018-2022

<b>Task #</b>	<b>Original Task Description</b>	<b>5 Year Activities</b>
#1 T	Education and outreach for riparian health	The website was used to post information about invasive weeds and watershed health
#2 T	Partner with other organizations	The City has worked with the Luckiamute Watershed Council, Polk SWCD, but no significant coordination to report.
#3 T	Develop Local Wetland Inv	Local Wetland Inventory completed. Not yet adopted
#4 TM	Track variances to identify illegal riparian plant removal	No progress occurred on this Task
#5 MB	Training for spill response and materials needed	Training occurred most years.
#6 MB	Develop SOP for catchbasin cleaning	No documentable progress
#7 MB	Develop a map with outfall locations	Outfall locations are identified on the GIS map. Field verification and inventory to be completed.
#8 B	Provide pet waste bags at stations	Aprx. 100,000 pet waste bags are purchased annually. Waste stations are maintained and filled
#9 B	Implement IDDE plan to identify illegal connections	No documentable progress
#10 MB	Training for IDDE inspections	Training has occurred most years
#11 M	Implement policy regarding charity car washes	No policy was implemented
#12 MBT	Implement and enforce a Post-Construction program	No Post-Construction program was developed.
#13 MB	Catch basin marking	No documentable progress
#14 MB	Public education – utility bill insert	See task #1
#15 MBT	Actively engage civic organization and business for stormwater related outreach	No progress
#16 MBT	Website develop to allow for stormwater related material	The website was updated during the review period to include a stormwater brochure
#17 MBT	Explore options for collaboration on monitoring	No progress

*T= Temperature, M=Mercury, B=Bacteria*

## TMDL Implementation Plan 5th Year Evaluation 2018-2022

## APPENDIX B

## 2022 BMP Revisions

Task #	Original Task Description	Revisions
#1 T	Education and outreach for riparian health	Task #1 lacked specificity. New BMPs provide clear goals and objectives
#2 T	Partner with other organizations	Task #2 was reworded and covered under BMP PE-6
#3 T	Develop Local Wetland Inv	Task was completed
#4 TM	Track variances to identify illegal riparian plant removal	As written this Task was unsuccessful as written.
#5 MB	Training for spill response and materials needed	Required language change for accuracy and direction. Removed and replaced with new ID BMPs
#6 MB	Develop SOP for catchbasin cleaning	Addressed under new GH-4
#7 MB	Develop a map with outfall locations	Covered under new ID-1 and ID-6
#8 B	Provide pet waste bags at stations	No changes
#9 B	Implement IDDE plan to identify illegal connections	Task #9 addressed under new ID-5
#10 MB	Training for IDDE inspections	No changes. Training is still included, but it will be directed toward new ID BMPs
#11 M	Implement policy regarding charity car washes	This Task was removed. Charity car washing is not a significant pollutant sources.
#12 MBT	Implement and enforce a Post-Construction program	Covered under new PC BMPs
#13 MB	Catch basin marking	Rewritten under new BMP PI-3
#14 MB	Public education – utility bill insert	Replaced with new Public Education Program
#15 MBT	Actively engage civic organization and business for stormwater related outreach	Replaced with new Public Education Program
#16 MBT	Website develop to allow for stormwater related material	Utilizing the website for education was retained
#17 MBT	Explore options for collaboration on monitoring	Removed. Performance monitoring will occur annually and submitted with annual report

T= Temperature, M=Mercury, B=Bacteria

APPENDIX C – Revised 2022 TMDL Implementation Matrix

City of Dallas TMDL IMPLEMENTATION PLAN MATRIX 2018 - 2023 5 <sup>th</sup> Year Evaluation								
BMP#	Source <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	Strategy <i>What will be done to control or reduce pollutant from source?</i>	How <i>Specifically, how will this be done?</i>	Fiscal Considerations <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	Measure <i>How will successful implementation or completion be measured?</i>	Timing <i>When will the strategy be completed?</i>	Milestone <i>What intermediate goals will be achieved and by when. Measure success</i>	Status
<b>POLLUTANT: Mercury</b>								
<b>MCM #1 Public Outreach</b>								
PE-1	Runoff from soil disturbance and direct discharge to waterway from riparian area	Develop a resource portfolio of outreach messages for the identified target audiences.	Resources to be developed by knowledgeable persons to reach target audiences	Work to be completed by consultant	Report updates in annual report	2022	Develop program foundation with focused approach	<b>Complete.</b>
PE-2	Runoff from soil disturbance and direct discharge to waterway from riparian area	Post relevant stormwater public education materials to the City's website.	Utilize material from portfolio to make FAQ sheets, brochures, etc	Staff	Document materials and topics covered annually and discuss in annual report	Ongoing annually	Completion of multiple documents on the website for the public to access. Update routinely	New material was posted in Sept 2022 which includes a brochure that addresses residents, landscaper, business audiences.
PE-3	Runoff from soil disturbance and direct discharge to waterway from riparian area	Participate in Krazy Days and/or other local events.	Host a booth or event and document materials	Small fund for display materials and incentive items	Document date of events and participation	Ongoing annually	Report number of materials handed out, date, and participation	
PE-4	Discharge from unvegetated riparian area	Provide educational opportunities and material for students.	Presentation in classroom or field events at a local park, etc	Staff time and presentation needs	Document date, # of students, and content	Ongoing annually	Report specifics of event including date, material covered, etc	
PE-5	Runoff from soil disturbance and direct discharge to waterway from riparian area	Mail informational letter to streamside property owners 2x during the 5 year term	Letters will cover streamside responsibilities and BMPs	Staff time and mailing cost	Complete mailing list in 2022/2023	2023 and 2025	Maintain records of how many recipients and copy of the letters	<b>Complete.</b> 252 property owners identified to receive the mailing

APPENDIX C – Revised 2022 TMDL Implementation Matrix

BMP#	Source <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	Strategy <i>What will be done to control or reduce pollutant from source?</i>	How <i>Specifically, how will this be done?</i>	Fiscal Considerations <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	Measure <i>How will successful implementation or completion be measured?</i>	Timing <i>When will the strategy be completed?</i>	Milestone <i>What intermediate goals will be achieved and by when. Measure success</i>	Status
PE-6	Runoff from soil disturbance and direct discharge to waterway from riparian area	Partner with local watershed council, SWCD, university, etc	<del>Provide financial support or other incentives for environmental activities in Dallas</del> Build productive relationships with other agencies	Tbd – agreement should be reached with the applicable group	Report annual progress in yearly report	Ongoing annually	<del>Document progress annually</del> Continue to partner with other agencies on collective efforts	
<b>MCM #2 Public Involvement</b>								
PI-1	Runoff from soil disturbance and direct discharge to waterway from riparian area	Maintain a website to post the most current environmental educational information	Post the TMDL Plan on the City website with educational material	Staff time	Post the plan in 2022 and post plan reports submitted to DEQ annually	To occur <b>each year</b> starting in 2022	Post new and updated material annually and report	<b>Complete.</b> The revised plan is posted on the website with an introduction.
PI-2	Runoff from soil disturbance and direct discharge to waterway from riparian area	Annual presentation to City Council	Work Session presentation	Consultant and staff	Report progress in yearly report	To occur each year starting in 2022/2023	Content and date to be included in annual report	<b>Complete.</b> City Council meeting held on November 21, 2022. TMDL PowerPt presentation.
PI-3	Runoff from soil disturbance and illicit discharges	Utilize community groups to mark catch basins and include an educational element	Utilize community groups to mark a number of basins each year	Budget for placards, and misc. costs for adhesive, kits, etc.	Track number of basins marked and report annually	To occur <b>each year</b> starting in 2024	Track number of markers installed, dates, volunteers. Describe educational element	

APPENDIX C – Revised 2022 TMDL Implementation Matrix

BMP#	Source <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	Strategy <i>What will be done to control or reduce pollutant from source?</i>	How <i>Specifically, how will this be done?</i>	Fiscal Considerations <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	Measure <i>How will successful implementation or completion be measured?</i>	Timing <i>When will the strategy be completed?</i>	Milestone <i>What intermediate goals will be achieved and by when. Measure success</i>	Status
<b>MCM #3 Illicit Discharge Detection and Elimination</b>								
ID-1	Runoff from soil disturbance and impervious area	Update the City's GIS system to include new stormwater data	Review WQMP to meet DEQ requirements	Staff time	<del>Document annual updates</del> <b>Develop a comprehensive map and update process</b>	To occur <b>each year</b> starting in 2022/2023	<del>Track annual assets (ie. outfalls, catchbasins, etc)</del> <b>Describe annual progress</b>	The City has utilized GIS and actively recruited for a GIS tech. in 2022
ID-2	Runoff from soil disturbance and impervious area	Develop an ordinance that prohibits non-stormwater discharges into the stormwater system	Utilize ordinances and programs from other agencies	Staff time involving legal	Provide DEQ annual progress on this BMP in the annual report	Complete by <del>2025/2026</del> <b>2024/2025</b>	Document annual activities	
ID-3	Runoff from soil disturbance and impervious area	Develop and enforce an escalating and response procedure to include construction sites, illegal dumping and illegal connections.	The plan will include escalating steps of enforcement	Staff time	Report progress and final to DEQ	Complete by <del>2025/2026</del> <b>2024/2025</b>	Document annual activities	
ID-4	Runoff from soil disturbance and impervious area	Annual staff training	Annual training by existing staff. Take advantage of inexpensive regional training	Include training in the annual budget	Report training date, # of employees in attendance	To occur <b>each year</b> starting in 2022/2023	Conduct annual training – develop a schedule. Yr 1 training by consultant	
ID-5	Runoff from soil disturbance and impervious area	Recordkeeping including response to complaint accounting	Utilize GIS or database to document response to calls and complaints	Staff time	Report # of complaints and outcome annually	To occur <b>each year</b> starting in 2022/2023	Develop a response process and tracking system	

APPENDIX C – Revised 2022 TMDL Implementation Matrix

<b>BMP#</b>	<b>Source</b> <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	<b>Strategy</b> <i>What will be done to control or reduce pollutant from source?</i>	<b>How</b> <i>Specifically, how will this be done?</i>	<b>Fiscal Considerations</b> <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	<b>Measure</b> <i>How will successful implementation or completion be measured?</i>	<b>Timing</b> <i>When will the strategy be completed?</i>	<b>Milestone</b> <i>What intermediate goals will be achieved and by when. Measure success</i>	<b>Status</b>
ID-6	Runoff from soil disturbance and impervious area	Conduct annual outfall inspections	Field inspect outfalls and maintain inventory	Staff time	Report activities in annual report	To occur <b>each year</b> starting in 2023/2024	Develop process and maintain digital inventory. Prepare for dry weather insp	
<b>MCM #4 Construction Site Runoff</b>								
CS-1	Runoff from soil disturbance and impervious area	Coordinate with the development community regarding the need for a 1200-C permit and a City ESCP Plan	Provide materials on the website and conduct site visits	Staff time	Report progress in yearly report	Ongoing to commence in 2023	Develop a flyer for builders/developers. Use in field and post on website	
CS-2	Runoff from soil disturbance and impervious area	Develop an Erosion Control Ordinance which includes DEQ requirements	Ordinance and document need to be consistent with 1200-C and 1200-CN programs	Staff time	Document annual progress	2025/2026	Report progress in each annual report	
CS-3	Runoff from soil disturbance and impervious area	Develop and enforce an escalating and response procedure to include qualifying construction sites	The response procedure will be linked to a process that applies to the ID, PC portions of the plan	Staff time	Report progress in annual report	2023/2024	Education will be emphasized prior to ordinance development. Develop draft	
CS-4	Runoff from soil disturbance and impervious area	Develop a tracking system	Will seek to eventually tie this process to GIS	Staff time	Report progress in annual report	2023/2024	Maintain annual tracking data	

APPENDIX C – Revised 2022 TMDL Implementation Matrix

<b>BMP#</b>	<b>Source</b> <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	<b>Strategy</b> <i>What will be done to control or reduce pollutant from source?</i>	<b>How</b> <i>Specifically, how will this be done?</i>	<b>Fiscal Considerations</b> <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	<b>Measure</b> <i>How will successful implementation or completion be measured?</i>	<b>Timing</b> <i>When will the strategy be completed?</i>	<b>Milestone</b> <i>What intermediate goals will be achieved and by when. Measure success</i>	<b>Status</b>
CS-5	Runoff from soil disturbance and impervious area	Send selected personnel to CESCL training and annual training for PW person	Utilize resources for local training	Training fees included in budget	Report training and recertification dates	2023/2024	Obtain training	
<b>MCM #5 Post-Construction Runoff Control for New and Redevelopment</b>								
PC-1	Runoff from soil disturbance and impervious area	Develop an ordinance or other regulatory mechanism such as design standards to meet the post-construction requirements	Utilize DEQ resources and mirror what other municipalities have done.	Staff time – potential for engineering costs	Document progress annually	Complete by 2025/2026	Describe progress in the annual report	
PC-2	Runoff from soil disturbance and impervious area	Evaluate the use of UICs in areas where stormwater cannot be infiltrated	Utilize engineering reports, soil surveys, field studies	Consulting cost	Report path forward in yearly report	2023/2024	Review regulatory language and soil data to determine feasibility	
PC-3	Runoff from soil disturbance and impervious area	Develop inspection and maintenance requirements for publically owned property	The plan should include a checklist for inspections	Staff time	Report annual progress	2024/2025	Add maintenance plan and protocol to GH manual	
PC-4	Runoff from soil disturbance and impervious area	Develop an inventory of private and public facilities	Review as-builts, field verify, etc	Staff time	Describe progress in the annual report	Complete by 2024/2025	Inventory shall include owner, installation date, type, etc.	
PC-5	Runoff from soil disturbance and impervious area	Staff training	Annual staff training for personnel	Cost of training	Report annual training activities	Ongoing starting in 2022/2023	Consultant to facilitate Year 1 training	



APPENDIX C – Revised 2022 TMDL Implementation Matrix

<b>BMP#</b>	<b>Source</b> <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	<b>Strategy</b> <i>What will be done to control or reduce pollutant from source?</i>	<b>How</b> <i>Specifically, how will this be done?</i>	<b>Fiscal Considerations</b> <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	<b>Measure</b> <i>How will successful implementation or completion be measured?</i>	<b>Timing</b> <i>When will the strategy be completed?</i>	<b>Milestone</b> <i>What intermediate goals will be achieved and by when. Measure success</i>	<b>Status</b>
PC-6	Runoff from soil disturbance and impervious area	Recordkeeping	Track facilities, ownership, age, type, etc	Staff time	Report annual activities	Ongoing starting in 2023/2024	Inventory existing facilities in 2023/2024	
<b>MCM #6 Good Housekeeping in Municipal Operations</b>								
GH-1	Pollution from municipal operations	Develop a Good Housekeeping Manual	The manual is a reference guide for operations personnel	Staff time w/ Consultant	Describe progress in the annual report	Complete by 2022/2023	Complete manual	
GH-2	Pollution from municipal operations	Monthly Inspections at Shop Facility	Inspections will occur according to Good Housekeeping Manual in Yr 2	Staff time	Provide completion date and documentation for inspections to DEQ	Conduct inspections starting in 2023/2024	Conduct inspections according to the manual	
GH-3	Pollution from municipal operations	Street Sweeping	Continue street sweeping activities	Staff time	Provide annual activities in annual report	To occur <b>each year</b> starting in 2023	Evaluate practices to improve effort. Record quarterly removal totals	
GH-4	Pollution from municipal operations	Catchbasin Cleaning	Continue catchbasin cleaning – clean 50% of total annually	Staff time	Evaluate practices to improve effort	To occur <b>each year</b> starting in 2023	Provide annual activities in annual report	
GH-5	Pollution from municipal operations	Annual training	Utilize consultant for initial training	Consultant	Record date, content, and employees	To occur <b>each year</b> starting in 2023	Describe progress in the annual report	

APPENDIX C – Revised 2022 TMDL Implementation Matrix

<b>BMP#</b>	<b>Source</b> <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	<b>Strategy</b> <i>What will be done to control or reduce pollutant from source?</i>	<b>How</b> <i>Specifically, how will this be done?</i>	<b>Fiscal Considerations</b> <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	<b>Measure</b> <i>How will successful implementation or completion be measured?</i>	<b>Timing</b> <i>When will the strategy be completed?</i>	<b>Milestone</b> <i>What intermediate goals will be achieved and by when. Measure success</i>	<b>Status</b>
<b>POLLUTANT: Temperature</b>								
<b>MCM #1 Public Education</b>								
PE-1	Sediment loading and lack of shade	Develop a resource portfolio of outreach messages for the 5 year evaluation period	Resources to be developed by knowledgeable persons	Work to be completed by consultant	Report updates in annual report	2022	Develop program foundation with focused approach	Complete
PE-4	Sediment loading and lack of shade	Mail informational letter to streamside property owners 2x during the 5 year term	Letters should cover streamside responsibilities such as tree preservation	Staff time and mailing cost	Document date, # of students, and content	Ongoing annually	Report specifics of event including date, material covered, etc	
PE-5	Sediment loading and lack of shade	Partner with local watershed council, SWCD, university, or other regional groups	Provide financial support or other incentives in exchange for environmental support	Tbd – agreement should be reached with the applicable group	Complete mailing list in 2022/2023	2023 and 2025	Maintain records of how many recipients and copy of the letters	
<b>MCM #2 Public Involvement</b>								
PI-1	Sediment loading and lack of shade	Maintain a website to post the most current environmental educational information	Post the TMDL Plan on the City website with educational material	Staff time	Post the plan in 2022 and post plan reports submitted to DEQ annually	To occur <b>each year</b> starting in 2022	Post new and updated material annually and report	

APPENDIX C – Revised 2022 TMDL Implementation Matrix

<b>BMP#</b>	<b>Source</b> <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	<b>Strategy</b> <i>What will be done to control or reduce pollutant from source?</i>	<b>How</b> <i>Specifically, how will this be done?</i>	<b>Fiscal Considerations</b> <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	<b>Measure</b> <i>How will successful implementation or completion be measured?</i>	<b>Timing</b> <i>When will the strategy be completed?</i>	<b>Milestone</b> <i>What intermediate goals will be achieved and by when. Measure success</i>	<b>Status</b>
PI-2	Sediment loading and lack of shade	Annual presentation to City Council	Work Session presentation	Consultant and staff	Report progress in yearly report	To occur each year starting in 2022/2023	Content and date to be included in annual report	
PI-3	Sediment loading and lack of shade	Utilize community groups to mark catch basins	Utilize community groups to mark a number of basins each year	Budget for placards, and misc. costs for adhesive, kits, etc.	Track number of basins marked and report annually	To occur <b>each year</b> starting in 2024	Track number of markers installed, dates, and volunteers	
<b>MCM #3 Illicit Discharge Detection and Elimination</b>								
ID-2	Sediment loading and lack of shade	Develop an ordinance that prohibits non-stormwater discharges into the stormwater system	Utilize ordinances and programs from other agencies	Staff time involving legal	Provide DEQ annual progress on this BMP in the annual report	Complete by <del>2025/2026</del> 2024/2025	Document annual activities. Use Phase II as guidance	
ID-3	(See CS-3)	Develop and enforce an escalating and response procedure to include construction sites, illegal dumping and illegal connections.	The plan will include escalating steps of enforcement	Staff time	Report progress and final to DEQ	Complete by <del>2025/2026</del> 2024/2025	Document annual activities	
ID-4	Sediment loading and lack of shade	Annual staff training	Annual training by existing staff. Take advantage of inexpensive regional training	Include training in the annual budget	Report training date, # of employees in attendance	To occur <b>each year</b> starting in 2022/2023	Conduct annual training – develop a schedule. Yr 1 training by consultant	

APPENDIX C – Revised 2022 TMDL Implementation Matrix

<b>BMP#</b>	<b>Source</b> <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	<b>Strategy</b> <i>What will be done to control or reduce pollutant from source?</i>	<b>How</b> <i>Specifically, how will this be done?</i>	<b>Fiscal Considerations</b> <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	<b>Measure</b> <i>How will successful implementation or completion be measured?</i>	<b>Timing</b> <i>When will the strategy be completed?</i>	<b>Milestone</b> <i>What intermediate goals will be achieved and by when. Measure success</i>	<b>Status</b>
<b>MCM #4 Construction Site Runoff</b>								
CS-2	Sediment loading and lack of shade	Develop an Erosion Control Ordinance which includes DEQ requirements	Ordinance and document need to be consistent with 1200-C and 1200-CN programs	Staff time	Document annual progress	2025/2026	Report progress in each annual report	
CS-3	Sediment loading and lack of shade	Develop and enforce an escalating and response procedure to include qualifying construction sites	The response procedure will be linked to a process that applies to the ID, PC portions of the plan	Staff time	Report progress in annual report	2023/2024	Education will be emphasized prior to ordinance development. Develop draft	
<b>MCM #5 Post Construction Runoff Control in New and Redevelopment</b>								
PC-1	Sediment loading and lack of shade	Develop an ordinance or other mechanism such as design standards to meet the post-construction reqs.	Utilize DEQ resources and mirror what other municipalities have done.	Staff time – potential for engineering costs	Document progress annually	Complete by 2025/2026	Describe progress in the annual report	
PC-3	Sediment loading and lack of shade	Evaluate the use of UICs in areas where stormwater cannot be infiltrated	Utilize engineering reports, soil surveys, field studies	Consulting cost	Report annual progress	2024/2025	Add maintenance plan and protocol to GH manual	
PC-5	Sediment loading and lack of shade	Develop an inventory of private and public facilities	Review as-builts, field verify, etc	Staff time	Report annual training activities	To occur annually starting in 2022/2023	Consultant to facilitate Year 1 training	

APPENDIX C – Revised 2022 TMDL Implementation Matrix

<b>BMP#</b>	<b>Source</b> <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	<b>Strategy</b> <i>What will be done to control or reduce pollutant from source?</i>	<b>How</b> <i>Specifically, how will this be done?</i>	<b>Fiscal Considerations</b> <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	<b>Measure</b> <i>How will successful implementation or completion be measured?</i>	<b>Timing</b> <i>When will the strategy be completed?</i>	<b>Milestone</b> <i>What intermediate goals will be achieved and by when. Measure success</i>	<b>Status</b>
PC-6	Sediment loading and lack of shade	Staff training	Annual staff training for involved personnel	Cost of training	Report annual activities	Ongoing starting in 2023/2024	Inventory existing facilities in 2023/2024	
<b>MCM #6 Good Housekeeping in Municipal Operations</b>								
GH-1	Pollution from municipal operations	Develop a Good Housekeeping Manual	Include protocol for retention of trees and native vegetation along waterways	Staff time w/ Consultant	Complete manual	Complete by 2022/2023	Describe progress in the annual report	
<b>POLLUTANT: Bacteria</b>								
<b>MCM # 1 Public Education</b>								
PE-1	Runoff from pervious surface, or illegal discharge	Develop a resource portfolio of outreach messages for the 5 year evaluation period	Resources to be developed by knowledgeable persons	Work to be completed by consultant	Target audiences and key messages have	2022	Develop program foundation with focused approach	Complete
PE-2	Runoff from pervious surface, or illegal discharge	Post relevant stormwater public education materials to the City's website.	Material in the form of FAQ sheets, articles, brochures, etc	Staff	Document materials and topics covered annually and discuss in annual report	Ongoing annually	Completion of multiple documents on the website for the public to access. Update routinely	
PE-3	Runoff from pervious surface, or illegal discharge	Participate in Krazy Days and/or other local events.	Host a booth or event and document materials	Small fund for display materials and incentive items	Document date of events and participation	Ongoing annually	Report number of materials handed out, date, and participation	

APPENDIX C – Revised 2022 TMDL Implementation Matrix

<b>BMP#</b>	<b>Source</b> <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	<b>Strategy</b> <i>What will be done to control or reduce pollutant from source?</i>	<b>How</b> <i>Specifically, how will this be done?</i>	<b>Fiscal Considerations</b> <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	<b>Measure</b> <i>How will successful implementation or completion be measured?</i>	<b>Timing</b> <i>When will the strategy be completed?</i>	<b>Milestone</b> <i>What intermediate goals will be achieved and by when. Measure success</i>	<b>Status</b>
PE-5	Runoff from pervious surface, or illegal discharge	Mail informational letter to streamside property owners 2x during the 5 year term	Letters should cover streamside responsibilities and BMPs	Staff time and mailing cost	Complete mailing list in 2022/2023	2023 and 2025	Maintain records of how many recipients and copy of the letters	
PE-7	Runoff from pervious surface, or illegal discharge	Maintain pet waste stations	Stock, install, and maintain pet waste stations	Maintain budget for this activity	Collect records of when stations are stocked	To occur <b>each year</b> starting in 2022/2023	Report yearly activity in annual report	
<b>MCM #2 Public Involvement and Participation</b>								
PI-1	Runoff from pervious surface or degraded riparian area	Maintain a website to post the most current environmental educational information	Post the TMDL Imp Plan and other educational information	Staff time	Post new and updated material annually and report	To occur <b>each year</b> starting in 2022	Post the plan in 2022 and post plan reports submitted to DEQ annually	
PI-3	Runoff from pervious surface or degraded riparian area	Utilize community groups to mark catch basins	Utilize community groups to mark a number of basins each year	Budget for placards, and misc. costs for adhesive, kits, etc.	Track number of basins marked and report annually	To occur <b>each year</b> starting in 2024	Track number of markers installed, dates, and volunteer	
<b>MCM #3 Illicit Discharge Detection and Elimination</b>								
ID-2	Runoff from soil disturbance and impervious area	Develop an ordinance that prohibits non-stormwater discharges	Develop a plan to meet the conditions of IDDE in 2022/2023	Staff time involving legal	Document annual progress	Complete by 2025/2026 <b>2024/2025</b>	Provide DEQ annual progress on this BMP in the annual report	

APPENDIX C – Revised 2022 TMDL Implementation Matrix

<b>BMP#</b>	<b>Source</b> <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	<b>Strategy</b> <i>What will be done to control or reduce pollutant from source?</i>	<b>How</b> <i>Specifically, how will this be done?</i>	<b>Fiscal Considerations</b> <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	<b>Measure</b> <i>How will successful implementation or completion be measured?</i>	<b>Timing</b> <i>When will the strategy be completed?</i>	<b>Milestone</b> <i>What intermediate goals will be achieved and by when. Measure success</i>	<b>Status</b>
ID-3	Runoff from soil disturbance and impervious area	Develop an enforcement response plan	The plan will include escalating steps of enforcement	Staff time	Report progress and final to DEQ	Complete by <del>2025/2026</del> 2024/2025	Document annual activities	
<b>MCM #4 Construction Site Runoff</b>								
CS-2	Runoff from soil disturbance and impervious area	Develop an Erosion Control Ordinance which includes DEQ requirements	Ordinance and document need to be consistent with 1200-C and/or 1200-CN programs	Staff time	Document annual progress	2025/2026	Report progress in each annual report	
CS-3	Runoff from soil disturbance and impervious area	Develop and enforce an escalating and response procedure to include qualifying construction sites	The response procedure will be linked to a process that applies to the ID, PC portions of the plan	Staff time	Report progress in annual report	2023/2024	Education will be emphasized prior to ordinance development. Develop draft	
<b>MCM #5 Post Construction Runoff Control in New and Redevelopment</b>								
PC-1	Runoff from soil disturbance and impervious area	Develop an ordinance or other regulatory mechanism such as design standards to meet the post-construction requirements	Utilize DEQ resources and mirror what other municipalities have done.	Staff time – potential for engineering costs	Describe progress in the annual report	Complete by 2025/2026	Document progress annually	

APPENDIX C – Revised 2022 TMDL Implementation Matrix

<b>BMP#</b>	<b>Source</b> <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	<b>Strategy</b> <i>What will be done to control or reduce pollutant from source?</i>	<b>How</b> <i>Specifically, how will this be done?</i>	<b>Fiscal Considerations</b> <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	<b>Measure</b> <i>How will successful implementation or completion be measured?</i>	<b>Timing</b> <i>When will the strategy be completed?</i>	<b>Milestone</b> <i>What intermediate goals will be achieved and by when. Measure success</i>	<b>Status</b> <i>This is the annual reporting column. Make certain you draw DEQ here in the annual report (“FY 2023/2024 progress is listed in the status column of the matrix</i>
PC-2	Runoff from soil disturbance and impervious area	Evaluate the use of UICs in areas where stormwater cannot be infiltrated	Utilize engineering reports, soil surveys, field studies	Consulting cost	Report path forward in yearly report	2023/2024	Review regulatory language and soil data to determine feasibility	
PC-3	Runoff from soil disturbance and impervious area	Develop inspection and maintenance requirements for publically owned property	The plan should include a checklist for inspections	Staff time	Report annual progress	2024/2025	Add maintenance plan and protocol to GH manual	
PC-4	Runoff from soil disturbance and impervious area	Develop an inventory of private and public facilities	Review as-builts, field verify, etc	Staff time	Describe progress in the annual report	Complete by 2024/2025	Inventory shall include owner, installation date, type, etc.	
PC-5	Runoff from soil disturbance and impervious area	Staff training	Annual staff training	Cost of training	Report annual training activities	To occur annually starting in 2022/2023	Consultant to facilitate Year 1 training	
<b>MCM #6 Good Housekeeping in Municipal Operations</b>								
GH-1	Pollution from municipal operations	Develop a Good Housekeeping Manual	Include protocol for retention of trees and native vegetation along waterways	Staff time w/ Consultant	Describe progress in the annual report	Complete by 2023/2024	Complete manual and track activities	
GH-3	Pollution from municipal operations	Street Sweeping	Continue street sweeping activities	Staff time	Provide annual activities in annual report	To occur <b>each year</b> starting in 2023	Evaluate practices to improve effort. Record quarterly removal totals	



APPENDIX C – Revised 2022 TMDL Implementation Matrix

<b>BMP#</b>	<b>Source</b> <i>What source is being addressed? (ex. runoff from construction sites, riparian condition)</i>	<b>Strategy</b> <i>What will be done to control or reduce pollutant from source?</i>	<b>How</b> <i>Specifically, how will this be done?</i>	<b>Fiscal Considerations</b> <i>How is the BMP funded? (ex. In the 2023 budget, grant, etc.)</i>	<b>Measure</b> <i>How will successful implementation or completion be measured?</i>	<b>Timing</b> <i>When will the strategy be completed?</i>	<b>Milestone</b> <i>What intermediate goals will be achieved and by when. Measure success</i>	<b>Status</b>
GH-4	Pollution from municipal operations	Catchbasin Cleaning	Continue catchbasin cleaning – clean 50% of total annually	Staff time	Provide annual activities in annual report	To occur <b>each year</b> starting in 2023	Evaluate practices to improve effort. Field verify condition and priority	
<b>Other Management Activities</b>								
		Develop a sustainable stormwater fee	Review possible options including an impervious surface study	Staff time	Provide annual activities in annual report	2025/2026	Annual progress shall include options considered, and next steps	
		Develop a Stormwater Management Plan (SWMP)	SWMP to be developed using Phase II as a guide	Consultant to complete	Report completion date and provide upon request	2022/2023	Develop the SWMP	
		Complete annual reports	Develop document based on recordkeeping	Consultant to complete	Complete and submit the annual report	By due date Nov 1 <sup>st</sup> annually		
		Evaluate public education activities according to WQMP	Choose 1 activity to promote and help lead other activities	Consultant to complete	Review activities with staff and determine most effective activity and why	To be submitted with annual report		

**APPENDIX C – Revised 2022 TMDL Implementation Matrix**

		Annually evaluate implementation efforts and program progress	Review and evaluative actions (monitoring)	Consultant to complete	Review and discuss with staff to plan changes for following year	To be submitted with annual report		
		Complete 5 <sup>th</sup> Year Assessment and Evaluation	Gather information based on recordkeeping and annual reports	Staff time	Complete assessment using DEQ guidelines	2026/2027		

	<b>Control Measures</b>
PE	Public Education
PI	Public Involvement and Participation
ID	Illicit Discharge Detection and Elimination
CS	Construction Site Runoff Control
PC	Post-Construction Runoff Control
GH	Good Housekeeping in Municipal Operations