

**City of Detroit 2018-2023 TMDL Implementation Matrix
Sept 2022 Revised Mercury TMDL**

Mercury, Bacteria, Temperature

Sources: Bacteria (e.g., domestic sewage, pet waste, failing onsite systems); Sediment and mercury loads (e.g., erosion of soil from construction and post-construction) in stormwater runoff; Solar radiation on streams due to lack of shade canopy

Purpose: Reduce bacteria and sediment and mercury loads from entering stormwater runoff and surface waters. Protect riparian corridors and shade canopy, protect safe beaver habitat, conserve water to mitigate solar heat on surface water

| # | WQMP Stormwater Measure BMP STRATEGY | MEASURE REPORTING STATUS DELIVERABLE | TIMELINE | BENCHMARK Goals, steps, milestones for implementation | FUNDING Plan Implementation Reasonable Assurance | REPORTING DELIVERABLE STATUS 5 Reports for 2018-2023 Report #5 |
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| Public Involvement and Participation Awareness of water quality protection programs | | | | | | |
| 1 | Reasonable assurance plan will be implemented and sustained overtime Cost analysis and estimation page 128-221 of https://www.oregon.gov/deq/wq/Documents/willHgtmdlwqmpF.pdf | Describe annually how budget was confirmed for plan implementation each year of implementation | 2018-2023 ongoing activity | 1. Update plan for mercury TMDL due Sept 2022 2. Budget development and City Council approval for plan development, implementation, annual status reporting and a five-year review | Annual costs and funding to determine extent of each BMP activity | Completed - Sept 3, 2022 deadline met for Hg plan updates |
| 2 | Provide opportunities for the public to effectively participate in the development and implementation TMDL plan | Annually provide web link for access to Plan and reports viewing | 2022 and then ongoing activity | Post City Council reviewed implementation plan and reports on website: Homepage - Detroit Oregon or https://detroitoregon.us/ Post revised mercury plan on website before Sept 3, 2022 | Funding included in basic operational costs. | Water Quality Reports - Detroit Oregon |
| Public Education and Outreach Conduct ongoing education and outreach to inform the public about the impacts of stormwater discharges on waterbodies and the steps that they can take to reduce mercury-related pollutants in stormwater runoff | | | | | | |
| 3 | Promote water quality protection – “Conserve water protect its source” | Report website link for water quality educational and outreach documents | 2022 and then ongoing activity | Incorporate water quality protection information on city website https://detroitoregon.us/ Post water quality documents, in addition to TMDL plan and matrix, on city website | Funding included in basic operational costs. | Forms; https://detroitoregon.us/forms/ https://detroitoregon.us/development-code-update/ |
| 4 | Educate residents about septic maintenance; pet waste; illicit discharges; riparian setbacks for temperature, and erosion control | Public Education and Outreach | July 2013 and every year after that | Annual Consumers Confidence Report | Water fund | https://detroitoregon.us/wp-content/uploads/2022/06/Annual-Water-Report.pdf |
| 5 | Annual city-wide cleanup day - Stormwater runoff from debris; Improper discharges that have the potential to infiltrate to groundwater and discharge to surface waters via overland flow or ditch conveyance | Report when annual cleanup day was held or if not budgeted for the year | 2018-2023 ongoing activity | Prepare flyer for cleanup day; Publicize flyer; Annually confirm if day will be held (City Council) | General Fund | Idanha hosted event in 06/25/2022 and Detroit residents participated. Detroit host 2023. |

| Pollution Prevention and Good Housekeeping for Municipal Operations | | | | | | |
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| Properly operate and maintain city facilities, using prudent pollution prevention and good housekeeping to reduce the discharge of bacteria and mercury-related pollutants, such as sediment, through the stormwater conveyance system to waters of the state | | | | | | |
| 6 | Wetland protection ordinance that includes protection of headwaters and riparian corridors and other groundwater resources that provides cool water inflow from groundwater, hyporheic (near surface), wetland, or other sources into waterbody during the hottest time of year. | Describe any reviews for new development or redevelopment for this activity | 2018-2023 ongoing activity | Inform residents and contractors during pre-construction phase | ----- | A couple in floodplain approved as per code by city planner and Marion county |
| 7 | Bacteria - Porta Potties in downtown are for special events – Flush toilet installed in 2018 so year round not required only for special events | Described approx.. number special event needing toilets | 2018-2023 ongoing activity as needed for events | Annual budget preparation obtain approval from city council & incorporate monies for porta potties in budget; purchase porta potty. | General Fund | Like previous years Porta-Potties supplied for special events at park to supplement new constructed toilet – Fish derby, 4 th of July, concert |
| 8 | Bacteria - Pet waste pick-up stations in-place | Report stations in-place for use | 2018-2023 ongoing | Maintain pet stations | General Fund | Like previous years - In-place and maintained 2 – flats and park |
| 9 | Conduct blowing of streets, parking lots, and other impervious surfaces; City Maintenance of run off ditches and culverts; Dust Control for non-paved areas; Educate Businesses of dust control in parking areas | Describe actions implemented supporting this activity | Clean and maintain areas | City Maintenance as needed; inform business when needed for public parking areas; Culverts and ditches checked and cleaned by city maintenance employee (Goal is once per week, but not required weekly) | Street Fund | As with previous years, street employee clean and maintain culverts, streets, weekly routine checks through year |
| 10 | Ensure city owned or operated facilities with industrial activity identified in DEQ's 1200-Z Industrial Stormwater General Permit have coverage under this permit. | Annually provide description, and date, of any new 1200Z City facility identified during the reporting year or document none | 2018-2023 ongoing activity | 1. Obtain 1200Z permit for applicable City operations 2. Initial check for: DEQ database for City owned 1200Z facilities & City building inventory 7/2/2022 and 7/7/2022 3. Evaluate new city owned facilities or changes for 1200Z | ----- | No new businesses requiring permits |
| Illicit Discharge Detection and Elimination | | | | | | |
| Implement and enforce a program to detect and eliminate illicit discharges into the stormwater conveyance system to reduce sediment load and other pollutants in runoff | | | | | | |
| 11 | Develop and routinely maintain a digital current map of stormwater conveyance system for location of outfalls and an outfall inventory, conveyance system and stormwater control locations | ----- | Reassess at five-year review in 2028 – Table 13-11 and 13-14 mercury 2019 WQMP | ----- | ----- | ----- |
| 12 | Prohibit non-stormwater discharges into the stormwater conveyance system (illegal discharges to stormwater system) a) Maintain a procedure or system to document all complaints or reports of illicit discharges into and from the stormwater conveyance system. Municipal code for verbal or written notifications for impacts to water quality to establish compliance ORD 227- (Amending ORD 222) Amendment to Nuisance (ORD 213) | Annually describe activities supporting the complaint response program and resolutions | 2018-2023 ongoing | Receive and respond to complaints regarding water quality concerns (erosion; illicit discharge; impact to riparian areas); Enforce nuisance control ordinance; Utilize sensitive and low-key process for enforcing ordinances to protect water | General Fund | No complaints requiring response; Focus on redevelopment post-fire and improved septic systems |

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| | <p>ORD 226- Ordinance to Regulate Storm Water Runoff</p> <p>b) Residents and contractors contacted if water quality is being impacted</p> <p>c) County referrals(septic/onsite)</p> | | | quality. Goal = Impacts resolved without enforcement; | | |
| 13 | Prohibit non-stormwater discharges into the stormwater conveyance system a) Through enforcement of an ordinance or other legal mechanism for appropriate enforcement procedures and actions to ensure compliance. | ----- | Reassess at five-year review in 2028 – Table 13-11 and 13-14 mercury 2019 WQMP | ----- | ----- | ----- |
| 14 | Prohibit non-stormwater discharges into the stormwater conveyance system a) Define the range of illicit discharges it covers, including those discharges that are conditionally allowed, such as non-stormwater discharges or flows such groundwater, irrigation water in the ordinance or other legal | ----- | Reassess at five-year review in 2028 – Table 13-11 and 13-14 mercury 2019 WQMP | ----- | ----- | ----- |

Construction Site Runoff Control

Sediment in runoff leaving construction sites and/or activity into stormwater conveyance system. Implement a Construction Site Runoff Control Program

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| 15 | Through ordinance or other regulatory mechanism, require a storm drainage and erosion control plan for all residential development over 25,000 square feet; and for all commercial, industrial, and recreational development <ol style="list-style-type: none"> 1. Protect Sensitive lands from construction and storm drainage relies on county for development 2. City check/Confirmation during development and redevelopment planning phase ordinances to establish setback from riparian 3. Coordinate permit acquisition with County and developers for >=1 acre | Annually describe activities supporting the construction program and resolutions(erosion control in-place during construction) | 2018-2023 ongoing | <p>Chapter 4 (detroitoregon.us) 4.2.3 Site Design Review - Application Submission Requirements</p> <p>Chapter 3 (detroitoregon.us) Design Standards</p> <p>Chapter 3.5 - Surface Water Management Sections: 3.5.1 Purpose 3.5.2 Applicability 3.5.3 Stormwater Plan Submittal 3.5.4 General Requirements 3.5.5 Surface Water Conveyance Standards 3.5.6 Pollution Reduction and Flow Control Standard</p> <p>SECTION 3.7.2 REQUIREMENTS FOR RIPARIAN CORRIDORS</p> <p>1.7.3 REQUIREMENTS FOR WETLANDS Submittal Requirements for Plans and Reports. 2. Grading Plan 3 Erosion Control Plan Storm Drainage Plan Required for New Development and Redevelopment. 1. Purpose: To minimize the amount of stormwater runoff resulting from development utilizing nonstructural controls where possible to protect and enhance water quality, to prevent and/or reduce soil erosion, and to prevent structural and environmental damage.</p> | Planning and development | No sites greater than ½ w/construction |
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| 16 | Refer project sites to DEQ, or the appropriate DEQ agent, a) To obtain NPDES 1200-C Construction Stormwater Permit coverage for construction projects that disturb one or more acres (or that disturb less than one acre, if it is part of a "common plan of development or sale" disturbing one or more acres | ----- | Reassess at five-year review in 2028 – Table 13-11 and 13-14 mercury 2019 WQMP | ----- | ----- | ----- |
| 17 | Require construction site operators to complete and implement an Erosion and Sediment Control Plan for construction project sites in jurisdictional area for minimum land disturbance of 21,780 square feet (one half of an acre) or more, and are not already covered by a DEQ 1200-C | ----- | Reassess at five-year review in 2028 – Table 13-11 and 13-14 mercury 2019 WQMP | ----- | ----- | ----- |
| 18 | Through ordinance or other regulatory mechanism, to the extent allowable under state law, require erosion controls, sediment controls, and waste materials management controls to be used and maintained at all qualifying construction sites one half of an acre or more and not covered by DEQ 1200-C (21,780 square feet). | ----- | Reassess fat five-year review in 2028 – Table 13-11 and 13-14 mercury 2019 WQMP | ----- | ----- | ----- |
| 19 | Develop, implement and maintain a written escalating enforcement and response procedure for all qualifying construction sites. The procedure must address repeat violations through progressively stricter response, as needed, to achieve compliance | ----- | Reassess at five-year review in 2028 – Table 13-11 and 13-14 mercury 2019 WQMP | ----- | ----- | ----- |

Post-Construction Runoff for New Development and Redevelopment

Storm runoff from impervious surfaces. Develop, implement, and enforce Post-Construction Program to reduce discharges of pollutants and control post-construction stormwater runoff from new development and redevelopment project sites in its jurisdictional area. Solar Radiation (lack of shade; tree and vegetation removal); Erosion of Sediment

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| 20 | Through ordinance or other regulatory mechanism, require a storm drainage and erosion control plan shall be required for all residential development over 25,000 square feet; and for all commercial, industrial, and recreational development. (A) The use of stormwater controls at all qualifying sites. (B) 1. A site-specific stormwater management approach that targets natural surface or pre-development hydrological function through the installation and long-term operation and maintenance of stormwater controls. | Annually describe activities supporting the construction program and resolutions(erosion control in-place during construction) | 2018-2023 ongoing | ORD 206- Providing for the Establishment of System Development Charges (SDCs) – storm drainage Chapter 4 (detroitoregon.us) 4.2.3 Site Design Review - Application Submission Requirements Chapter 3 (detroitoregon.us) Design Standards Chapter 3.5 - Surface Water Management Sections: 3.5.1 Purpose 3.5.2 Applicability 3.5.3 Stormwater Plan Submittal 3.5.4 General Requirements 3.5.5 Surface Water Conveyance Standards 3.5.6 Pollution Reduction and Flow Control Standard SECTION 3.7.2 REQUIREMENTS FOR RIPARIAN CORRIDORS 1.7.3 REQUIREMENTS FOR WETLANDS Submittal Requirements for Plans and Reports. 2. Grading Plan 3 Erosion Control Plan Storm Drainage Plan Required for New Development and Redevelopment. 1. Purpose: To minimize the amount of | SDCs | No sites greater than ½ w/construction |
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| | | | | stormwater runoff resulting from development utilizing nonstructural controls where possible to protect and enhance water quality, to prevent and/or reduce soil erosion, and to prevent structural and environmental damage. | | |
| 21 | <p>Through ordinance or other regulatory mechanism, require new or redeveloped areas that create or replace 10,890 square feet or more of new impervious surface area:</p> <p>(A) The use of stormwater controls at all qualifying sites.</p> <p>(B)</p> <ol style="list-style-type: none"> 1. A site-specific stormwater management approach that targets natural surface or pre-development hydrological function through the installation and long-term operation and maintenance of stormwater controls. 2. Retain rainfall on-site and minimize the offsite discharge of precipitation utilizing stormwater controls that infiltrate and evapotranspiration stormwater. 3. For projects that are unable to fully retain rainfall/runoff from impervious surfaces on-site, the remainder of the rainfall/runoff from impervious surfaces must be treated prior to discharge with structural stormwater controls. The stormwater structural controls should be designed to remove, at a minimum, 80 percent of the total suspended solids. 4. City program for long-term operation and maintenance of stormwater controls at project sites that are under the ownership of a private entity. | ----- | Reassess at five-year review in 2028 – Table 13-11 and 13-14 mercury 2019 WQMP | ----- | ----- | ----- |