Marion County Willamette Basin Nonpoint Source TMDL

Mercury, Bacteria, & Temperature

Implementation Plan

November 2022

Contact Information:

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Background

The Oregon Department of Environmental Quality (DEQ) established a Total Maximum Daily Load (TMDL) for the Willamette Basin in 2006. The basis for the TMDL is to require Designated Management Agencies (DMAs) to implement strategies to improve water quality standards for impaired waters within their jurisdiction. Marion County was designated a DMA and therefore required to implement the appropriate management strategies to minimize the named pollutants in the Willamette Basin. DEQ's Revised Mercury Total Maximum Daily Load Water Quality Management Plan, November 22, 2019. Additional information can be accessed at: https://www.oregon.gov/deq/wq/tmdls/Pages/willhgtmdlac2018.aspx. The TMDL mercury allocations specified in EPA's 2021 TMDL are effective for designated management agencies and responsible persons named in DEQ's Mercury TMDL WQMP.

Per the DEQ, a TMDL is "a written quantitative plan and analysis for attaining and maintaining water quality standards and includes the elements described in OAR 340-042-0040. These elements include a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet state water quality standards, allocations, of portions of that amount to the pollutant sources or sectors, and a Water Quality Management Plan to achieve water quality standards". The TMDL, or clean water plan, is a science-based approach to remediating polluted waters to meet state water quality standards. As the Willamette Basin Water Quality Management Plan (WQMP) states, a TMDL defines the amount of a pollutant that can be present in a waterbody without causing water quality criteria to be exceeded.

Under section 303(d)(1) of the Federal Clean Water Act, the North Santiam River, the Little North Santiam, the Willamette River, the Pudding River, as well as segments of the Middle Willamette Subbasin are listed and, in addition, are exceeding water quality standards for temperature, bacteria, toxins, and dissolved oxygen. Parameters specifically addressed in this TMDL Implementation Plan (IP) are bacteria, temperature, and mercury (parameters may be added if recommendations or requirements change and/or include different elements that are problematic in specific water bodies, such as the Pudding River).

The population size of Marion County is estimated to be about 343,742 (2020). DEQ recognizes Marion County as an operator of a small Municipal Separate Storm Sewer System (MS4) and as such, the County has developed and implemented a Stormwater Management Plan (SWMP). Although written principally to address stormwater issues in the Salem-Keizer Urban Growth Boundary (UGB), many of the activities presented in the plan will successfully address several TMDL requirements as well.

Land Use Compatibility Statement

(See *Appendix B – Land Use Compatibility Statement*)

Nonpoint Source Load Allocations & Water Quality Targets

Counties are included with other nonpoint source sectors such as agriculture and forestry, totaling an aggregated 88% in mercury reduction load allocation.

CATEGORY	CONTRIBUTION (%)	EPA 2019 ALLOCATED REDUCTION		
	Middle Willamette 17090007	North Santiam 17090005	Middle Willamette 17090007	Molalla-Pudding 17090009
NPDES Permitted Stormwater Point Source Discharges	10%	**75%**	**97%**	**75%**
Groundwater (agriculture, forest, shrub, developed, other)	11%	88%	88%	88%
Atmospheric deposition direct to water	9%	**35%**	**35%**	**35%**
Non-Permitted Urban Stormwater	4%	**75%**	**97%**	**75%**
General Nonpoint Source - Agriculture, forest, shrub, developed, other (runoff and sediment)	62%	**88%**	**97%**	**88%**
Legacy Metals Mines	0%	95%	95%	95%
NPDES Permitted Wastewater Discharges	3%	**10%**	**74%**	**10%**
NPDES Permitted Industrial Discharges	2%	**10%**	**17%**	**10%**

Legal Authority

Through the Marion County Board of Commissioners, Marion County has the legal authority to enforce local law specifically through approved ordinances and orders to carry out the required management strategies used to meet the TMDL allocations.

Management Strategies

Appendix C - Management Strategies - TMDL Implementation Matrix intends to address water bodies that do not meet water quality standards. In it, the matrix outlines management strategies, fiscal analyses, performance measures, milestones, status, targeted pollutants, and timelines. Impairment pollutants listed on the matrix include bacteria, temperature, mercury, pesticides, nitrates, and metals. Modifications will be made in the future based on parameters defined per specific water bodies, such as the Pudding River.

Best Management Practices (BMPs) have been developed and employed, both inside and outside of the Urban Growth Boundary (UGB), consistently across the county since the approval of the SWMP. These BMPs are used in all facets of Marion County Public Works activities which typically include road maintenance and construction, parks maintenance and development, vegetation management, land development, capital improvements, building and planning inspections, and fleet maintenance. This has created a system through which the BMPs have been institutionalized, creating a consistency in action throughout Marion County. Because the BMPs are already an integral part of the County's activities, the IP will not employ any operational modifications. Programmatically, Marion County will continue implementation of current standards apart from changes being made to Land Development and Capital Improvement procedures.

Upon review of WQMP Tables 13-12, 13-13, and 13-15, there are currently no known gaps in existing pollution controls. Modifications made to the plan are based on new mercury TMDL requirements and are listed below.

The following are the management strategies that the County is employing to reduce targeted pollutants. It should be noted that the point source elements of county operations, such as the wastewater treatment plant and the disposal sites, have their own National Pollutant Discharge Elimination System Permits (NPDES). These sources are monitored separately from the IP activities. Pollutants covered in the IP are paired with actions that are intended to address the non-point sources throughout the county. Point source pollutants are addressed under the existing NPDES permit (see *Appendix D - NPDES MS4 Phase II General Stormwater Permit*).

Mercury Reductions

Mercury can be emitted by naturally occurring sources like forest fires, geothermal springs, and geologic deposits. Mercury deposition is also caused by anthropogenic sources from processes such as coal combustion, industrial uses, and burning of fossil fuels. In addition to the above sources, mercury can also be found in products such as thermometers, thermostats, dental and lab equipment, button cell batteries, fluorescent bulbs (tubes and CFLs), mercury automobile and appliance switches, barometers, and blood pressure gauges. Because mercury binds to soil particles, actions that prevent sediment from entering runoff can lower mercury pollutant levels in receiving waters.

Pollution Prevention & Good Housekeeping for County Operations

The NPDES MS4 Phase II General Permit requires that Marion County properly operate and maintain its facilities, using prudent pollution prevention and good housekeeping measures to reduce the discharge of pollutants through the MS4 to waters of the state. In this effort, the components that satisfy elements of the NPDES Permit are also being used to satisfy the TMDL program requirements as these efforts are being implemented throughout the county (see *Appendix D - NPDES MS4 Phase II General Permit*).

BMP Program

Training

Marion County operational crews abide by the Best Management Practices for Clean Water Manual (https://www.co.marion.or.us/PW/ES/waterquality/Pages/outreach.aspx) which provides a set of BMPs for all maintenance and operational activities. The manual was updated in Spring 2022. Field staff and operational crews also receive a training that explains water quality regulations and BMPs upon hire and once every 5 years. Additionally, a BMP field training course was recently developed and incorporated. The first training took place in February 2022 and the second is being scheduled and scoped out for Fall 2022.

Roads Operations Erosion Control

Erosion control is a primary concern for many of the County's Road Operations maintenance activities. It is part of the Marion County BMP Program to implement erosion and sediment control devices during activities such as ditching. The County is particularly conscientious about erosion when performing maintenance along waterways. Mercury will be addressed by attempting to reduce the amount of erosion that occurs during and after construction activities, through streamside plantings, which create solid root structures thereby preventing bank erosion. Erosion and sediment control devices are always used when working on culverts, bridges, and road shoulders along stream banks. To ensure that the road crews are working in compliance with the BMPs, training is provided on a regular basis and frequent worksite inspections are conducted. As a means of targeting and correcting issues of erosion, internal processes instruct roads maintenance crews to report any incidence of erosion to their supervisor. The BMP manual can be found here: https://www.co.marion.or.us/PW/ES/waterquality/Pages/outreach.aspx

Vegetation Maintenance

All Public Works programs are responsible for following the BMPs. Additionally, Parks, Bridge Crew, and Vegetation Management have a general policy of vegetation retention where public and ecologic safety are not threatened. Parks follows the state stream buffer requirements or better, creating a minimum of 100 feet between any tree removal and a water body.

Marion County has established good working relationships with the City of Salem, the Marion Soil and Water Conservation District, and the various watershed councils that function within the County. These partnerships provide an important means of working with the public. The County will continue to collaborate on educational workshops (including those on noxious weed control and erosion control techniques) with different organizations and agencies.

Street Sweeping

The County Road Operations and Maintenance Division partakes in regular sweeping duties across county. In addition to regular sweepings, crews are dispatched to target locations based on a community notification system through the Public Works Dispatch Center. Consistent monitoring from within the department, in conjunction with participation from the public, helps to ensure that roadway debris is collected and removed instead of ending up in waterways.

Catch Basin Cleaning

The County Road Operations and Maintenance and Environmental Services Divisions conduct regular catch basin cleanings throughout the county ensuring that the stormwater system is functioning in an optimal manner, reducing issues of flooding, and allowing for the entrapment and removal of roadway and ditch sediment, further preventing it from being washed into receiving waters.

Illegal Dumping

Marion County has a nuisance control program in which crews are dispatched to complaint sites to retrieve and remove various wastes from roadways and ditches (up to and including liquid, solid, organic, recyclable, and hazardous wastes). In addition, deceased animal carcasses are removed and disposed of. Furthermore, Marion County will continue to address complaints of dumpings and illicit discharges from the public and handle each case as appropriate. If the complaint occurs inside the NPDES MS4 Phase II Stormwater Management Area, the County will continue to utilize enforcement capabilities. Outside of the Stormwater Management Area, the County will respond to spills and incidents occurring inside the county Right of Way or on county property. This response is according to our internal guidelines for response. Responding to an incident includes reporting to OERS or DEQ and potentially containing and/or the use of environmental response contractors for clean-up. If the illicit discharge occurs outside of the county Right of Way, the County will refer the issue to the DEQ. Response will be modified when Marion County implements the illicit discharge section.

Public Education & Outreach

The NPDES MS4 Phase II General Permit requires that Marion County 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 pollutants in stormwater runoff. In this effort, the educational and outreach components that satisfy elements of the NPDES Permit also satisfy the TMDL program requirements as these efforts are being implemented throughout the county (see *Appendix D - NPDES MS4 Phase II General Permit*).

Waste Reduction

Marion County has established a successful waste reduction and recycling program that includes many venues of outreach and education. The County will continue to develop and expand programs such as the EarthWISE program and the Master Recycler Program. The EarthWISE program assists businesses in becoming more environmentally friendly by reducing the amount of waste generated and increasing the use of recycled and non-toxic products. EarthWISE has recently updated core requirements for certification to move towards best practice that reduce mercury exposure by supporting conversion to LED lighting and, for industrial members, address proper handling and clean-up of toxic chemicals and cleaners to reduce exposure to sewers and waterways.

The Master Recycler Program has recently shifted its curriculum to a materials management focus, based on the Oregon DEQ 2050 Vision for Materials Management. It is intended to educate and

involve members of the general public and covers topics such as “recycling right”, proper use and disposal of hazardous materials and chemicals, reducing greenhouse gas emissions, and release of pollutants (including mercury) into the air. The class encourages students to take the information learned through the seven-week course and apply it to community projects that spread the message to their community groups and peers.

Community Disposal

Marion County will address the reduction of mercury in waterways by providing a means of proper disposal through the Household Hazardous Waste Facility (HHW) and the Salem-Keizer Recycling and Transfer Station (SKRTS). The HHW and SKRTS provides a means for the community to properly dispose of items such as mercury thermometers and fluorescent lights. Marion County also has a dedicated Recycle Guide webpage to help direct community members to other, potentially more convenient, mercury disposal sites who will accept items such as thermostats, mercury bearing devices, and mercury switches.

Small Business Disposal

Marion County provides a Free Mercury Collection program for Conditionally Exempt Small Quantity Generators (CESQG). Under this program, CESQGs can take elemental mercury and mercury containing devices (i.e., switches, thermostats, thermometer, barometers, manometers, etc.) to the Marion County HHW Facility. The CESQGs need only to make an appointment with Marion County's HHW Facility to drop their mercury-containing waste off. Fluorescent light tubes are not accepted under the Free Mercury Disposal Program, but the public can take them to the Marion County SKRTS Recycling Center or can search for another recycler on the dedicated Recycle Guide database (https://apps.co.marion.or.us/recycle/).

Communications

Marion County Public Works has recently hired a Communications Coordinator who oversees and implements strategic social media campaigns aimed at educating the public on environmental messaging including pollutants and hazards to the environment, best practices for sustainable living, and what resources are available to them. In addition, Environmental Specialist staff are routinely working in coordination with the Communications Coordinator to specifically meet the targeted needs of the TMDL program and NPDES Permit.

Enforcement of Prohibited Pollutants

The timeline for implementation for this management strategy will take place before the deadline of March 3, 2024. The County will develop enforcement capability to prohibit mercury and mercury-related pollutants discharging to waterbodies. In addition, the County will utilize the current Illicit Discharge Detection and Elimination program to maintain a procedure or system to document all complaints or reports of mercury and mercury-related pollutant discharges to county-owned lands and properties and to waterbodies from county lands and properties.

Illicit Discharge Detection & Elimination

To address water pollution coming from illegal dumping or discharge, Marion County will develop a county-wide ordinance that prohibits, at minimum, turbid discharges. Educational materials will be developed to inform the community about the new law and about ways they can help detect illicit discharge and report the activities. Marion County will expand its internal training, detection, and reporting system so that staff can accurately report illicit discharges with ease.

Construction Site Runoff Control

The timeline for implementation for this management strategy will take place before the deadline of September 3, 2025. Because at the time of development of this document clarification regarding acceptable strategies to meet these requirements were not confirmed we will use a preferred action and a substitute action.

Preferred Action: Apply the 1200-CN program county-wide; this will require expansion of the Construction Erosion and Sediment Control ordinance county-wide. (March 2025)

Substitute Action(s):

1. Develop a strategy to high potential residential and commercial development (May 2024)
2. Determine proper legal authority to requiring construction and erosion control measures (May 2024)
3. Develop legal authority to require construction and erosion control measures (March 2025)

Bacteria Reductions

Public Education & Outreach

As stated earlier, the NPDES MS4 Phase II General Permit requires that Marion County 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 pollutants in stormwater runoff. In this effort, the educational and outreach components that satisfy elements of the NPDES Permit also satisfy the TMDL program requirements as these efforts are being implemented throughout the county (see *Appendix D - NPDES MS4 Phase II General Permit*).

Pet Waste

Bacteria can collect on roadways and stem from sources such as uncaptured pet waste which can contribute to bacterial pollutants in runoff. It can then convey through the stormwater system into receiving waters. Marion County will focus on improper disposal of pet waste by reducing the amount of pet waste that enters waterways. By increasing awareness, members of the community will have a better understanding of the impact that pet waste has on surrounding bodies of water. To help address this problem, Marion County will use several waste reduction programs such as social media campaigns to educate the public about pet waste and its impact on water quality when improperly disposed of. All Marion County Parks provide pet waste stations for the promoted appropriate disposal of pet waste. Potential educational opportunities that may arise

with partnering agencies like Marion County Dog Services, outside organizations, and municipalities will be welcomed and considered.

Septic System Education

Because sewer services are not offered in Marion County, except for the services provided in the East Salem Service District and the Brooks Community Service District, failing septic systems are contributors of bacteria levels in waterways. Marion County will focus on detecting and correcting illicit discharge from failing septic systems. Education is necessary for new and even existing septic system owners when wastewater treatment occurs on private property. This awareness helps to deter or prevent system failures. It is especially important for properties bordering or near receiving waters where septic effluent discharges can influence water quality. Septic systems can contaminate drinking water wells if not properly installed or maintained. In addition, potential influence of nutrients can lead to eutrophication (nitrogen) or become a contaminant source (phosphorus). Onsite Wastewater Specialists who work in the Building and Planning Division have created outreach materials to better educate homeowners about the proper techniques of septic system ownership. Materials include videos, lecturing series, or pre-crafted sources like the EPA Septic Smart and DEQ Septic Smart materials.

Volunteer Opportunities

Marion County facilitates volunteer opportunities to help the public become actively involved and to participate in various water quality-minded events such as riverbank and stream cleanups. This helps to reinforce the idea that the community plays an important role in protecting water quality. Marion County will continue to work with watershed councils, neighborhood associations, and educators to recruit volunteers to participate in educational and informative programs including opportunities for curb drain marking, storm drain stenciling programs, and Adopt-a-Road programs.

Temperature Reductions

Solar radiation (thermal energy) has a large impact on waterways that are lacking proper coverage or buffering systems. Stagnant flows also influence and increase water temperatures. For temperature and erosion, the County will continue to focus on increasing shade along waterways and stabilization throughout the stormwater conveyance system.

Stream Tree Program

Public participation is an important means of addressing non-point source pollution. The temperature TMDL will be addressed in part by educating the public on why it is important to keep temperature levels low and on ways to decrease current waterway temperature(s). The Stream Tree Program is designed to provide trees to any watershed council within Marion County. The trees are to be planted along streams and waterways to increase shade, reduce water temperature, and provide critical ecological habitat. Funding is dispersed based on which projects meet the requirements of the program. The objective is to increase shade along these waterways to help decrease water temperature. The County will continue to develop this program and encourage people who own property near waterways across the county to keep the banks shaded.

Vegetation Maintenance

Vegetation management is one of the County's primary road maintenance activities. The BMPs for roadside mowing and tree trimming require that crews leave as much shade over waterways as possible and limit vegetation removal near streams. This includes mowing rather than attempting to eradicate vegetative growth. In addition, if mature trees that are located within 50' of a waterway need to be removed (generally due to road safety concerns), they are to be replaced at a 2:1 ratio within the same watershed. This mitigation ensures that vegetation and shade are maintained, if not increased, in county right-of-way.

Costs & Funding

Funding for parameters required by the TMDL is captured in the existing operational budget.

Performance Monitoring

Due to the nature of non-point source pollution, the effectiveness of actions taken to improve water quality can be difficult to assess. Some potential exists to capture measurable data on efforts made to educate Marion County staff and the public on water quality protection.

The County uses a cloud-based training system which records type, attendance, quantity, stages of trainings and educational workshops provided by the County in person and remotely. Training and process improvement data will be kept for the established BMP program.

Regarding behavioral changes within the community, procedural improvements, such as developing and enforcing ordinances, could potentially decrease the number of pollutants entering local waterways. Actions taken to develop and implement the new ordinances will be recorded.

Marion County has a robust social media marketing and online presence. Educational and outreach materials are distributed on digital platforms and metrics such as views or impressions, engagement, or audience interactions, and shares and expansions of audience are used to judge content performance and inform future outreach efforts.

Areas of the Plan have been implemented, as indicated by the matrix; however, additional data collection procedures will be created where needed and existing procedures will undergo periodic review to better monitor and capture detail. Timelines indicated in the matrix may be adjusted based on internal processes.

Reporting & Adaptive Management

Marion County will track TMDL implementation activities and report to DEQ annually on progress and accomplishments. Marion County will evaluate the IP every five years following approval. The evaluation will include a review of water quality data and other information to evaluate the effectiveness of the Plan relative to the pollution reduction goals. The report will describe what information was used in the evaluation, the findings of the evaluation and the basis for this

reasoning. If the evaluation indicates that the IP is not adequate to meet the pollution reduction goals, we will modify and resubmit the Plan or undertake alternative efforts to achieve these goals to meet the listed timelines. In addition, Marion County will review and revise the IP as needed following DEQ's reevaluation of the TMDL. Any challenges experienced in meeting the IP will be reported during the Annual Report.

Because this IP is structured to work in tandem with the SWMP, and because the County's resources are limited, we would appreciate the ability to continue to combine reporting for the TMDL Annual Report and the NPDES Annual Report.

Annual reporting will be posted to the Marion County website and made accessible to the public. The Plan and subsequent Annual Reporting will be posted at the time of submittal to the DEQ.

Appendices

Appendix A – Land Use Compatibility Statement
Appendix B – Management Strategies - TMDL Implementation Matrix
Appendix C – NPDES MS4 Phase II General Stormwater Permit
Appendix D – Stormwater Management Plan

Appendix A – Land Use Compatibility Statement

State of Oregon Department of Environmental Quality

Land Use Compatibility Statement

What is a Land Use Compatibility Statement?

A LUCS is a form developed by DEQ to determine whether a DEQ permit or approval will be consistent with local government comprehensive plans and land use regulations.

Why is a LUCS required?

DEQ and other state agencies with permitting or approval activities that affect land use are required by Oregon law to be consistent with local comprehensive plans and have a process for determining consistency. DEQ activities affecting land use and the requirement for a LUCS may be found in Oregon Administrative Rules (OAR) Chapter 340, Division 18.

When is a LUCS required?

A LUCS is required for nearly all DEQ permits and certain approvals of plans or related activities that affect land use prior to issuance of a DEQ permit or approval. These permits and activities are listed in section 1.D on p. 2 of this form. A single LUCS can be used if more than one DEQ permit or approval is being applied for concurrently.

Permit modifications or renewals also require a LUCS when any of the following applies:

1. Physical expansion on the property or proposed use of additional land;
2. Alterations, expansions, improvements or changes in method or type of disposal at a solid waste disposal site as described in OAR 340-093-0070(4)(b);
3. A significant increase in discharges to water;
4. A relocation of an outfall outside of the source property; or
5. Any physical change or change of operation of an air pollutant source that results in a net significant emission rate increase as defined in OAR 340-200-0020.

How to complete a LUCS:

Step	Who does it?	What happens?
1.	Applicant	Applicant completes Section 1 of the LUCS and submits it to the appropriate city or county planning office.
2.	City or County Planning Office	City or county planning office completes Section 2 of the LUCS to indicate whether the activity or use is compatible with the acknowledged comprehensive plan and land use regulations, attaches written findings supporting the decision of compatibility, and returns the signed and dated LUCS to the applicant.
3.	Applicant	Applicant submits the completed LUCS and any supporting information provided by the city or county to DEQ along with the DEQ permit application or approval request.

Where to get help:

For questions about the LUCS process, contact the DEQ staff responsible for processing the permit or approval. DEQ staff may be reached at 1-800-452-4011 (toll-free, inside Oregon) or 503-229-5630. For general questions, please contact DEQ land use staff listed on our Land Use CompatibilityStatement page online.

Cultural resources protection laws:

Applicants involved in ground-disturbing activities should be aware of federal and state cultural resources protection laws. ORS 358.920 prohibits the excavation, injury, destruction, or alteration of an archeological site or object or removal of archeological objects from public and private lands without an archeological permit issued by the State Historic Preservation Office. 16 USC 470, Section 106, National Historic Preservation Act of 1966 requires a federal agency, prior to any undertaking, to take into account the effect of the undertaking that is included on or eligible for inclusion in the National Register. For further information, contact the State Historic Preservation Office at 503-378-4168, ext. 232.

Land Use Compatibility Statement

Section 1 – To be completed by the applicant	
1A. Applicant Name: Marion County Public Works	1B. Project Name: Willamette Basin Mercury TMDL Implementation Plan
Contact Name: Matt Knudsen	Physical Address: Unincorporated Marion County
Mailing Address: 5155 Silverton Rd NE	City, State, Zip: N/A, Oregon, N/A
City, State, Zip: Salem, OR 97305	Tax Lot #: N/A
Telephone: (503) 365-3187	Township: N/A Range: N/A Section: N/A
Tax Account #: N/A	Latitude: N/A
	Longitude: N/A

1C. Describe the project, include the type of development, business, or facility and services or products provided (attach additional information if necessary):

The Oregon Department of Environmental Quality (DEQ) established a Total Maximum Daily Load (TMDL) for the Willamette Basin in 2006. The basis for the TMDL is to require Designated Management Agencies (DMAs) to implement strategies to improve water quality standards for impaired waters within their jurisdiction. Marion County was designated a DMA and therefore required to implement the appropriate management strategies to minimize the named pollutants in the Willamette Basin. DEQ's Revised Mercury Total Maximum Daily Load Water Quality Management Plan, November 22, 2019. Additional information can be accessed at: https://www.oregon.gov/deq/wq/tmdls/Pages/willhgtmdlac2018.aspx. The TMDL mercury allocations specified in EPA's 2021 TMDL are eff

1D. Check the type of DEQ permit(s) or approval(s) being applied for at this time.

- ☐ Air Quality Notice of Construction
- ☐ Air Contaminant Discharge Permit
- ☐ Air Quality Title V Permit
- ☐ Air Quality Indirect Source Permit
- ☐ Parking/Traffic Circulation Plan
- ☐ Solid Waste Land Disposal Site Permit
- ☐ Solid Waste Treatment Facility Permit
- ☐ Solid Waste Composting Facility Permit (includes Anaerobic Digester)
- ☐ Conversion Technology Facility Permit
- ☐ Solid Waste Letter Authorization Permit
- ☐ Solid Waste Material Recovery Facility Permit
- ☐ Solid Waste Energy Recovery Facility Permit
- ☐ Solid Waste Transfer Station Permit
- ☐ Waste Tire Storage Site Permit
- ☐ Pollution Control Bond Request
- ☐ Hazardous Waste Treatment, Storage or Disposal Permit
- ☐ Clean Water State Revolving Fund Loan Request
- ☐ Wastewater/Sewer Construction Plan/ Specifications (includes review of plan changes that require use of new land)
- ☐ Water Quality NPDES Individual Permit
- ☐ Water Quality WPCF Individual Permit (for onsite construction-installation permits use the DEQ Onsite LUCS form)
- ☐ Water Quality NPDES Stormwater General Permit (1200-A, 1200-C, 1200-CA, 1200-COLS, and 1200-Z)
- ☑ Water Quality General Permit (all general permits, except 600, 700-PM, 1700-A, and 1700-B when they are mobile)
- ☐ Water Quality 401 Certification for federal permit or license

This application is for: ☐ Permit Renewal ☐ New Permit ☐ Permit Modification ☑ Other: Implementation Plan

Section 2 – To be completed by city or county planning official	
Applicant name: Marion County Public Works	Project name: Willamette Basin Mercury TMDL Implementation Plan

Instructions: Written findings of fact for all local decisions are required; written findings from previous actions are acceptable. For uses allowed outright by the acknowledged comprehensive plan, DEQ will accept written findings in the form of a reference to the specific plan policies, criteria, or standards that were relied upon in rendering the decision with an indication of why the decision is justified based on the plan policies, criteria, or standards.

2A. The project proposal is located: ☐ Inside city limits ☐ Inside UGB ☑ Outside UGB

2B. Name of the city or county that has land use jurisdiction (the legal entity responsible for land use decisions for the subject property or land use): Marion County

2C. ☑ This project is not within the jurisdiction of any other land use, zoning, or planning entity
☐ This project is also within the jurisdiction of the following land use, zoning, or planning entity _____

2D. Is the activity allowed under Measure 49 (2007)? ☑ No, Measure 49 is not applicable ☐ Yes, if yes, then check one:

☐ Express; approved by DLCD order #:

☐ Conditional; approved by DLCD order #:

☐ Vested; approved by local government decision or court judgment docket or order #:

2E. Is the activity a composting facility?
☑ No ☐ Yes; Senate Bill 462 (2013) notification requirements have been met.

2F. Is the activity or use compatible with your acknowledged comprehensive plan as required by OAR 660-031?
Please complete this form to address the activity or use for which the applicant is seeking approval (see 1.C on the previous page). If the activity or use is to occur in multiple phases, please ensure that your approval addresses the phases described in 1C. For example, if the applicant's project is described in 1C. as a subdivision and the LUCS indicates that only clearing and grading are allowed outright but does not indicate whether the subdivision is approved, DEQ will delay permit issuance until approval for the subdivision is obtained from the local planning official.

☐ The activity or use is specifically exempt by the acknowledged comprehensive plan; explain:

☐ Yes, the activity or use is pre-existing nonconforming use allowed outright by (provide reference for local ordinance):

☐ Yes, the activity or use is allowed outright by (provide reference for local ordinance):

☐ Yes, the activity or use received preliminary approval that includes requirements to fully comply with local requirements; findings are attached.

☑ Yes, the activity or use is allowed; findings are attached.

☐ No, see 2D. above, activity or use allowed under Measure 49; findings are attached.

☐ No, (complete below or attach findings for noncompliance and identify requirements the applicant must comply with before compatibility can be determined):
Relevant specific plan policies, criteria, or standards:

Provide the reasons for the decision:

Additional comments (attach additional information as needed):
See attached inplementation plan.

Planning Official Signature: Lindsey King Title: Principal Planner

Print Name: Lindsey King Telephone #: 503-566-4162 Date: 10/18/2022

If necessary, depending upon city/county agreement on jurisdiction outside city limits but within UGB:

Planning Official Signature: Title:

Print Name: Telephone #: Date:

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.

Appendix B – Management Strategies - TMDL Implementation Matrix

MARION COUNTY - MANAGEMENT STRATEGIES 2021-2022
TMDL IMPLEMENTATION MATRIX

MANAGEMENT STRATEGY	ACTION CATEGORY	SWMA ONLY	PRACTICE	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS/ EVALUATION	BACTERIA	TEMERATURE	MERCURY	PESTICIDES	NITRATES	METALS	NPDES PHASE II MS4
CSRC	Construction & Development	✓	Develop Post-Construction Runoff Control Ordinance	NPDES permit requirement to update Post-Construction Runoff Control ordinance. Requiring threshold inside SWMA at 1/4 acre.	Accounted for in annual budget	Implementation	September 3, 2025	2021 draft ordinance	Complete; associated Engineering Standards have been revised and adopted by BoC	✓		✓	✓	✓	✓	✓
CSRC	Construction & Development	✓	Post-Construction Monitoring	Develop a program that involves periodic inspection of post-construction measures to assure effective operation of these features.	Accounted for in annual budget	Inspection tracking	Completed; ongoing	Development of GIS component; 2025	Program developed; improvements to be made through GIS mapping capabilities and possible expansion of coverage area			✓			✓	✓
CSRC	Erosion Control		Develop ESCP Plan Review Process	Develop a process for reviewing Erosion & Sediment Control Plans for MC jurisdictional construction projects.	Accounted for in annual budget	Tracking issued/denied permits	Completed	Consistency in procedure and improved tracking 2025	LDEP uses plan review checklists for developed and redeveloped properties; working to improve tracking mechanisms			✓			✓	✓
CSRC	Erosion Control	✓	Construction Site Monitoring	MC will inspect construction sites and ensure that erosion and sediment control plans are being followed.	Accounted for in annual budget	Tracking of completion and thoroughness of inspections	September 3, 2025	Development of GIS component 2025	Program developed; improvements to be made through GIS mapping capabilities and possible expansion of coverage area			✓			✓	✓
CSRC	Erosion Control	✓	Incorporate Planning Review of PCRC Plans	Develop a process for reviewing Erosion & Sediment Control Plans for construction projects in MC that incorporates PCRC requirements.	Accounted for in annual budget	Tracking issued/denied permits	Completed	Consistency in procedure and improved tracking 2025	LDEP uses plan review checklists for developed and redeveloped properties; working to improve tracking mechanisms			✓			✓	✓
CSRC	Erosion Control	✓	Update Construction Erosion and Sediment Control Ordinance	NPDES permit requirement to update Construction Erosion Sediment Control ordinance. Requiring threshold inside SWMA at 1/4 acre.	Accounted for in annual budget	Approved	September 3, 2025	Prior approval 2012	Ordinance 1448 adopted by MC BoC on September 28, 2022; associated Engineering Standards have been revised and adopted by BoC			✓			✓	✓
CSRC	Erosion Control		Countywide 1200-CN Program	Adopt 1200-CN program county-wideSubstitute Action(s): 1. Develop a strategy to high potential residential and commercial development (May 2024) 2. Determine proper legal authority to requiring construction and erosion control measures (May 2024) 3. Develop legal authority to require construction and erosion control measures (March 2025)	Increased # permits and fees associated	Program Implemented	September 3, 2025	MWQAC, BoC, then DEQ approval by 2025	Program must be developed, approved, then implemented county-wide, expanding from the SWMA			✓				
EPP	Erosion Control		State Partnership	Working in conjunction with the Agricultural and Forestry Departments to seek beneficial solutions to problematic erosion and sediment areas;	Accounted for in annual budget	Contacts	March 3, 2024	N/A	Preliminary stages of development			✓				
EPP	Illicit Discharge	✓	Water Quality Testing in Marion County	MC will partner with cities, watershed councils, and the Marion Soil and Water Conservation District to ensure that water quality data is available for use during TMDL implementation. Any water quality data that is collected by MC will be integrated into TMDL implementation planning.	Funding to be drawn from SWMA fees, if needed	N/A	Completed; ongoing	N/A	MC does not conduct water quality testing. MC may provide support to other entities engaging in testing.	✓	✓	✓	✓	✓	✓	✓
EPP	Illicit Discharge		Countywide Adoption of IDDE Enforcement Program	Adopt countywide ordinance to implement illicit discharge of turbid water into county maintained ROW. An alternative proposal is to extend Illicit Disharge ordinance county-wide.	Accounted for in annual budget	Number of complaints	March 3, 2024	Proposal to BOC in 2023. Adoption of ordinance March 2024.		✓		✓	✓	✓	✓	✓
EPP	Illicit Discharge	✓	Legal Prohibition and Enforcement Ordinance	Develop an ordinance to address dumping of illicit discharge in MC.	No additional budget required	Implementation	Completed	January 2011	Ordinance 1311 adopted by MC BoC on January 12, 2011.	✓		✓	✓	✓	✓	✓
EPP	Illicit Discharge		Chronic Illicit Discharge Tracking	GIS component; incorporated into GIS IDDE Survey123 form; reports can be run from input data	Accounted for in annual budget	Volume of reporting	Completed; ongoing countywide	Development of reporting mechanism; March 2024	No such chronic discharges have been established.	✓		✓	✓	✓	✓	✓
EPP	Illicit Discharge		IDDE Complaint Response	Marion County receives and logs complaints regarding illegal dumpings, illicit discharges, and other water quality-related issues and deals with them appropriately. Marion County will develop a formal complaint response program to address complaints concerning construction activities.	Accounted for in annual budget	Dispatch Center Complaint Log; GIS Mapping	Completed; ongoing	Response time averaging within one day	Complaints are received and handled on a case-by-case basis; complaints logged through the Dispatch Center and through GIS mapping	✓		✓	✓	✓	✓	✓
EPP	Illicit Discharge		IDDE Education - External	Develop an educational program; information on MC website for citizens to recognize and report illicit discharge.	Accounted for in annual budget	Volume of reporting	Completed; ongoing	March 2024	Program will be redeployed from social media approach	✓		✓	✓	✓	✓	✓
EPP	Illicit Discharge		IDDE Education - Internal	Develop an educational program for MC staff to recognize and report illicit discharge.	Accounted for in annual budget	Volume of reporting	Completed; ongoing	March 2024	Program will be redeployed with a GIS component	✓		✓	✓	✓	✓	✓

MANAGEMENT STRATEGY	ACTION CATEGORY	SWMA ONLY	PRACTICE	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS/ EVALUATION	BACTERIA	TEMERATURE	MERCURY	PESTICIDES	NITRATES	METALS	NPDES PHASE II MS4
EPP	Illicit Discharge		IDDE Reporting (External)	Develop a public-facing reporting system to be used by citizens to report illicit discharge.	Accounted for in annual budget	Volume of reporting; response time	Completed; ongoing	March 2024	System development is complete; improvements being developed through GIS system.	✓		✓	✓	✓	✓	✓
EPP	Illicit Discharge		IDDE Reporting (Internal)	Develop an internal reporting system to be used by internal PW staff to report illicit discharge.	Accounted for in annual budget	Volume of reporting; response time	Completed; ongoing	March 2024	System development is complete; improvements being developed through GIS system.	✓		✓	✓	✓	✓	✓
EPP	Illicit Discharge		Records Management System	Developmet of system to manage data collection in regards to illegal dumping and illicit discharges.	Accounted for in annual budget	Data input; report generation	Completed; ongoing	March 2024	Program development is complete; establishing a GIS component	✓		✓	✓	✓	✓	✓
EPP	Illicit Discharge		Illegal Dumping	Nuisance control program; crews dispatched to complaint sites to retrieve and remove wastes from roadway and ditches (deceased animals, liquid, solid, organic, recyclable, hazardous wastes, etc.). MC will continue to address complaints of dumpings and illicit discharges from the public and handle each case as appropriate.	Accounted for in annual budget	# of complaints	Ongoing	N/A	Program is sustained by MCPW Dispatch Center, Environmental, and Safety staff; some technological improvements will be considered in the future	✓		✓	✓	✓	✓	
EPP	Solid Waste		Legal Prohibition and Enforcement Ordinance	Ordinance developed to prevent illegal dumping and nuisance accumulation.	Accounted for in annual budget	Implementation	Completed	February 2022	Ordinance 1439 adopted by MC BoC on February 9, 2022: Chapter 8.05 Solid Waste Management - 8.05.160 Littering and disturbance of solid waste prohibited.	✓		✓	✓	✓	✓	
PE&O	Education & Outreach		Point of Contact Program (POC)	Provide written information on ways to protect water quality to MC customers. MC POC's: Public Works Reception, and Planning/Landuse Department, etc.	Accounted for in annual budget	N/A	Completed; ongoing	Material distribution; span of outreach	Several materials on waste reduction and stormwater quality have been developed and distributed; more materials will be developed with new programs.	✓	✓	✓	✓	✓	✓	✓
PE&O	Education & Outreach		Social Media Messaging	Messages are distributed through Facebook, Youtube, Nextoor, etc. about water quality impacts, recycling, composting, and reducing waste.	Accounted for in annual budget	Reach and engagement tracking	Completed; ongoing	Monthly topics; at least one message per month per permit year	Outreach messaging is shared through multiple social media outlets	✓		✓	✓	✓		✓
PE&O	Education & Outreach		Marion Soil and Water Conservation District (SWCD) Educational Programs	Collaborate with the SWCD on education and outreach programs	Accounted for in annual budget	Number of events and quantity of materials	Completed; ongoing	Communicatio n as needs arise	Continue to work with the SWCD as programs and projects arise.	✓	✓	✓	✓	✓	✓	✓
PE&O	Education & Outreach		Promotion & Maintainance of Public Website	Environmental Specialist keeps track of website contents and updates as necessary; establish a website that provides information on stormwater and ways citizens can help improve water quality. Citizens can use the MCPW website to find out how to volunteer for projects related to water quality.	Accounted for in annual budget	Periodic review; Tracking: G:\Environmenta l Services\Water Quality\MC WQ Website Check-In.xlsx	Completed; ongoing	Twice annually, website will be reviewed for accuracy and content	Updated 04/06/22: SWMP Document, contact information, and educational materials.	✓	✓	✓	✓	✓	✓	✓
PE&O	Education & Outreach		Regional City Water Quality Educational Programs	Collaborate with regional partners on education and outreach programs.	Accounted for in annual budget	Number of events and quantity of materials	Completed; ongoing	Monthly and quarterly meetings attended (MWOG, MWQAC, ACWA, etc.)	Continue to work with regional partners as programs and projects arise.	✓	✓	✓	✓	✓	✓	✓
PE&O	Education & Outreach		Messaging & Activities	MC will continue to partner with community groups to host community events.	Accounted for in annual budget	Number of events	Completed; ongoing	2022-23 to focus on GI awareness	Topics of focus will cover post-construction green infrastructure and LID, water quality, erosion and sediment, other topics of importance, etc.			✓			✓	✓
PE&O	Education & Outreach		Septic	Marion County will focus on detecting and correcting illicit discharges from failing septic systems; will use educational outreach materials including videos, lecturing series, or pre-crafted sources like the EPA Septic Smart and DEQ Septic Smart materials. Especially important for properties bordering or near receiving waters where septic effluent discharges can influence water quality.	Accounted for in annual budget	Video views; inspection counts; customer interactions	Completed; ongoing	Outreach campaign once per permit term	Ongoing; public education and outreach through meetings, letters and brochures, permitting, inspection, and complaint response, GIS mapping	✓			✓			
PE&O	Education & Outreach		Communications	MC Communications Coordinator implements strategic social media campaigns aimed at educating the public on environmental messaging including pollutants and hazards to the environment, best practices for sustainable living, and what resources are available to them. Environmental Specialist staff are routinely working in coordination with the Communications Coordinator to specifically meet the targeted needs of the TMDL program and NPDES Permit.	Accounted for in annual budget	Social media views or impressions, engagement, or audience interactions, shares and expansions of audience	Completed; ongoing	Regular schedule of campaigns based on target audience and topic	Education and outreach program far exceeds required expectations through frequency of interactions with the public			✓				

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PE&O	Education & Outreach		Interpretive Pet Waste Signs in Parks	Install interpretive signs in the parks to educate public on proper disposal of pet waste. Parks provide pet waste stations for the promoted appropriate disposal of pet waste.	Accounted for in annual budget	Bags placed in stations; parks visits	Completed; ongoing	Pet waste signs and stations installed and functional	Design and installation of signs; signs damaged by fires will be replaced in course of restoration.	✓						
PE&O	Education & Outreach		Pet Waste	Marion County will focus on improper disposal of pet waste by reducing the amount of pet waste that enters waterways through educational awareness; will use reduction programs such as social media campaigns.	Accounted for in annual budget	Parks visits; social media "views"	Completed; ongoing	One awareness campaign per permit year	Ongoing	✓						
PE&O	Erosion Control		Erosion Control and Stormwater Management Summit Education	Participate annually in the Erosion Control and Stormwater Management Summit in partnership with the Mid Willamette Outreach Group; Erosion Control & Stormwater Management Summit Training is a training resource for home builders, developers, engineers, architects, landscapers, construction contractors, and municipal staff and crew; event provides continuing education or erosion prevention and sediment control training.	Accounted for in annual budget	Metrics gathered after each event	Completed; ongoing	Annual participation	Hosted annually			✓			✓	✓
PE&O	Stewardship		Watershed Council - Community Meetings & Educational Programs	Attend watershed council and community meetings as available to discuss pertinent water quality issues and potential partnerships. Collaborate to implement educational workshops, projects, and presentations.	Accounted for in annual budget	Meeting frequency, number of events and quantity of materials	Completed; ongoing	N/A	Environmental Services Divisional Staff track efforts, topic, and time spent with committees, organizations, and councils. Continue to work with the councils as programs and projects arise.	✓	✓	✓	✓	✓	✓	✓
PE&O	Stewardship		Citizen Advisory Committee	Marion Water Quality Advisory Committee	Accounted for in annual budget	Frequency of meetings; attendees	Completed; ongoing	N/A	Committee assists in decision-making and planning regarding NPDES permitting and TMDL program requirements							✓
PE&O	Stewardship		Volunteer	MC to continue working with watershed councils, neighborhood associations, and educators to recruit volunteers to participate in educational and informative programs including opportunities for curb drain marking, storm drain stenciling programs, and Adopt-a-Road programs.	Accounted for in annual budget	Volunteerships tracked internally and through Volunteers Services	Completed; ongoing	Frequency of events and number of volunteers	N/A	✓						
PE&O	Waste Reduction		Master Recycler Program	Train citizens in ways to reduce solid waste and hazardous waste impacts as well as redirecting recyclables out of waste stream	Accounted for in annual budget	Enrollment	Completed; ongoing	N/A	Program is offered once or twice per year based on enrollment demands		✓	✓	✓	✓		✓
PE&O	Waste Reduction		EarthWISE Program	Provide consulting to businesses regarding waste reduction programs.	Accounted for in annual budget	Enrollment	Completed; ongoing	N/A	Waste reduction assistance is provided to business in MC; program will expand to meet the different needs of businesses.	✓		✓			✓	✓
PE&O	Waste Reduction		Waste Reduction Programs	MC established successful waste reduction and recycling program; includes outreach and education. MC will continue to develop and expand programs (EarthWISE, Master Recycler, etc).	Accounted for in annual budget	Completion of certificates; attendance and completion of courses	Completed; ongoing	N/A	EarthWISE core requirements for certification to move towards best practice that reduce mercury exposure by supporting conversion to LED lighting and, for industrial members, address proper handling and clean-up of toxic chemicals and cleaners to reduce exposure to sewers and waterways. Master Recycler Program has recently shifted its curriculum to a materials management focus, based on the Oregon DEQ 2050 Vision for Materials Management.			✓				
PP&GHCO	BMP		Ditch Maintenance	Ditches will be maintained countywide by MC operations crews and contractors	Accounted for in annual budget	Crew daily logs	Completed; ongoing	N/A	Ditches are maintained	✓		✓	✓		✓	✓
PP&GHCO	BMP		Best Management Practices for Clean Water Manual & Training	Marion County operational crews abide by the Best Management Practices for Clean Water Manual which provides a set of BMPs for all maintenance and operational activities. Field staff and operational crews receive training that explains water quality regulations and BMPs.	Accounted for in annual budget	Training attendance records	Upon hire and at 5 year intervals	Manual updated in Spring 2022	Periodic review; BMP field training course was recently developed and incorporated. First training: February 2022; second: slated for Fall 2022.	✓	✓	✓	✓	✓	✓	✓
PP&GHCO	BMP		Integrated Vegetation Management	Implement policy, such as Integrated Vegetation Management (IVM), to prevent over-application of maintenance and construction products (ex: reduce fertilizer use at public parks, on public lawns, landscaped areas, riparian corridors; avoid over application of deicing salts).	Accounted for in annual budget	Training attendance records	Completed; ongoing	N/A	Included in Road Operations Vegetation Maintenance Program; procedural component of the Limit 10 BMP Program.		✓		✓			

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PP&GHCO	BMP		Mitigation Sites	Protect and enhance streamside properties as offset for required activities within water ways.	Accounted for in annual budget	Tracking native and invasive species; tracking maintenance	Completed; ongoing	N/A	Eight sites actively managed (3 on Abiqua, 3 in Jefferson-Marion, 1 Eola Bend, one inland)	✓	✓	✓	✓	✓	✓	
PP&GHCO	BMP		Catch Basin Cleaning	The County Road Operations and Maintenance and Environmental Services Divisions conduct regular catch basin cleanings throughout the county ensuring that the stormwater system is functioning in an optimal manner, reducing issues of flooding, and allowing for the entrapment and removal of roadway and ditch sediment, further preventing it from being washed into receiving waters.	Accounted for in annual budget	Crew Daily Logs; Dispatch Center Complaint Log	Completed; ongoing	Catch basins maintained at regular frequency.	Crews work on regular schedule/ Crews also dispatched to target locations based on a community notification system through the Public Works Dispatch Center. Complaints tracked.			✓				
PP&GHCO	BMP		Roads Operations Erosion Control	BMP Program to implement erosion and sediment control devices during activities such as ditching. To ensure that the road crews are working in compliance with the BMPs; training is provided on a regular basis and frequent worksite inspections are conducted. As a means of targeting and correcting issues of erosion, internal processes instruct roads maintenance crews to report any incidence of erosion to their supervisor.	Accounted for in annual budget	Number of controls purchased and deployed	Completed; ongoing	February 2022 - First of reoccurring field BMP training complete	Mercury will be addressed by attempting to reduce the amount of erosion that occurs during and after construction activities, through streamside plantings; erosion and sediment control devices are always used when working on culverts, bridges, and road shoulders along stream banks.			✓				
PP&GHCO	BMP		Street Sweeping	The County Road Operations and Maintenance Division partakes in regular sweeping duties across county. Consistent monitoring from within the department, in conjunction with participation from the public, helps to ensure that roadway debris is collected and removed instead of ending up in waterways.	Accounted for in annual budget	Crew Daily Logs; Dispatch Center Complaint Log	Completed; ongoing	Sweeping areas on regular frequency during dry period.	Crews sweep districts on schedule. Crews also dispatched to target locations based on a community notification system through the Public Works Dispatch Center. Complaints tracked.			✓				
PP&GHCO	BMP		Establish Native Vegetation	Encourage removal of invasive species and plant native vegetation for good riparian coverage.	Accounted for in annual budget	Crew daily logs	Completed; ongoing	N/A	BMPs, mitigation sites, and in partnership.		✓					
PP&GHCO	BMP		Roadside Mowing & Tree Trimming	BMPs for roadside mowing and tree trimming require that crews leave as much shade over waterways as possible and limit vegetation removal near streams. This includes mowing rather than attempting to eradicate vegetative growth. In addition, if mature trees that are located within 50' of a waterway need to be removed (generally due to road safety concerns), they are to be replaced at a 2:1 ratio within the same watershed. This mitigation ensures that vegetation and shade are maintained, if not increased, in County right-of-way.	Accounted for in annual budget	Crew daily logs; trees mitigated	Completed; ongoing	N/A	Activities are conducted in compliance with BMP Program Manual.			✓				
PP&GHCO	BMP		Vegetative Buffers	All Public Works programs are responsible for following general policy of vegetation retention where public and ecologic safety are not threatened (ex: follow State stream buffer requirements, creating a minimum of 100 feet between any tree removal and a water body). MC will continue to collaborate on educational workshops (including those on noxious weed control and erosion control techniques) with different organizations and agencies.	Accounted for in annual budget	Crew daily logs	Completed; ongoing	N/A	Activities are conducted in compliance with BMP Program Manual.			✓				
PP&GHCO	Solid Waste		Solid Waste Programs	Provide the citizens of Marion County with an environmentally responsible and inexpensive system for recycling and reducing solid waste.	Accounted for in annual budget	Annual summary reports	Completed; ongoing	MC looking to expand geographic locations of solid waste disposal sites	Recycling and composting programs are in operation; program will continue to develop to meet the needs of MC citizens.			✓	✓	✓	✓	✓

MANAGEMENT STRATEGY	ACTION CATEGORY	SWMA ONLY	PRACTICE	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS/ EVALUATION	BACTERIA	TEMERATURE	MERCURY	PESTICIDES	NITRATES	METALS	NPDES PHASE II MS4
PP&GHCO	Solid Waste		Household Hazardous Waste (HHW) Mercury Disposal Program	MC will address mercury reduction in waterways by providing a means of proper disposal through the Household Hazardous Waste Facility (HHW) and the Salem-Keizer Recycling and Transfer Station (SKRTS). HHW and SKRTS provide a means for the community to properly dispose of items such as mercury thermometers and fluorescent lights. MC also has a dedicated Recycle Guide webpage to help direct community members to other, potentially more convenient, mercury disposal sites who will accept items such as thermostats, mercury bearing devices, and mercury switches.	Accounted for in annual budget	Annual summary reports	Completed; ongoing	N/A	Disposal services are currently provided; program will continue to develop to meet the needs of MC citizens.			✓			✓	✓
PP&GHCO	Solid Waste		Small Business Mercury Disposal	MC provided Free Mercury Collection Program for Conditionally Exempt Small Quantity Generators (CESQG). CESQGs can take elemental mercury and mercury containing devices to the MC HHW Facility.	Accounted for in annual budget	Annual summary reports	Completed; ongoing	N/A	Program facilitated by MC Environmental Services Solid Waste Division			✓				
PP&GHCO	Stewardship		Stream Tree Program	Program is designed to provide trees to MC watershed councils to provide shade trees and other native vegetation along ditches and waterways; consult with watershed councils on riparian planting projects. Trees to be planted along streams and waterways to increase shade, reduce water temperature, and provide critical ecological habitat.	Accounted for in annual budget	Number of participants; quantity of trees planted; geographic locations (GIS)	Completed; ongoing	Over 27,000 trees planted since program's inception; goal of 8,000 trees per permit year	Program temporarily affected by wildfires. MC County will continue to develop this program and encourage people who own property near waterways across the County to keep the banks shaded.		✓	✓		✓	✓	✓
PP&GHCO	Stewardship		Adopt-A-Road Volunteer Groups	Marion County Operationa Division hosts and facilitates Adopt-a-Road Program for roadside and ditch clean-up efforts.	Accounted for in annual budget	Events tracked via Dispatch Center	Completed	N/A	Satisfied; reoccurring	✓	✓	✓	✓	✓	✓	✓
PP&GHCO	Stewardship		Riparian Restoration Project	Complete riparian restoration project or implement strategy to preserve/improve existing riparian vegetation.	Accounted for in annual budget	# of projects	Completed	N/A	The County will remain open to partnering on this type of project.	✓	✓	✓	✓	✓	✓	✓
PP&GHCO	Stewardship		Storm Drain Marker	Volunteers are sworn in through Marion County Volunteer Services, with approval from the Board; volunteers mark storm drains throughout county; repair and renew damaged markers	Accounted for in annual budget	GiS Evaluation and Tracking Mechanism in place; not yet launched.	Completed	N/A	Satisfied; fine-tuning GIS tracking system	✓	✓	✓	✓	✓	✓	✓
PP&GHCO	Stewardship		Storm Drain Stenciling Program	Label Marion County storm drains with stencils that read "Dump No Waste Drains To Stream".	Accounted for in annual budget	N/A	Completed; ongoing	All known storm drains in SWMA labeled.	Kits are available for loan to other jurisdictions in the county; shared with Earthwwise members; stencils loaned to community members	✓		✓	✓	✓	✓	✓
PP&GHCO	Stewardship		Placement of Vegetative Materials	Instream placement of large woody debris, bed, bank material, or vegetation (e.g. gravel).	Accounted for in annual budget	# of projects	Completed	Planned Project;Complted Project	The County will remain open to partnering with groups for habitat improvement.		✓					
PP&GHCO	Waste Reduction		Park Refuse and Waste Reduction	Portable toilets and trash receptacles at MC Parks reduces the occurance of improper disposal of waste near water ways and green spaces. Especially during summer and public events (fairs, markets, holidays, etc).	Accounted for in annual budget	Quantity of facilities per visitors	Completed; ongoing	N/A	All MC parks have permanent or temporary facilities in place. Additional restroom facilities will be added and frequency of garbage removal will be increased as needed during busy periods. Wildfire damaged facilities in the process of being repaired and replaced.	✓		✓	✓	✓		
SWMP	Management Plan	✓	Implement SWMP	Plan will be implemented within SWMA/urban areas	Accounted for in annual budget	Annual reporting	Completed; ongoing	N/A	NPDES requirements will be satisfied within the urban area	✓	✓	✓	✓	✓	✓	✓

Appendix C – NPDES MS4 Phase II General Stormwater Permit

State of Oregon
Department of
Environmental
Quality

www.oregon.gov/DEQ; Search "MS4"

General Permit

National Pollutant Discharge Elimination System
Municipal Separate Storm Sewer Systems
Phase II General Permit

Oregon Department of Environmental Quality
Stormwater Program
700 NE Multnomah St., Suite 600
Portland, OR 97232

Issued pursuant to Oregon Revised Statute 468B.050 and Section 402 of the Federal Clean Water Act

Registered to:

Major Receiving Streams:

Wasteload/Load Allocations (if any):

Sources Covered By This Permit

This permit authorizes regulated small municipal separate storm sewer systems to discharge stormwater to surface waters of the state, in accordance with the requirements, limitations and conditions set forth.

Justin Green
Water Quality Division Administrator

Issuance Date: November 30, 2018
Modification Date: March 12, 2021
Effective Date: March 1, 2019

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permit registrant is authorized to discharge municipal stormwater to surface waters of the state only in conformance with the requirements, limitations and conditions set forth in the following schedules. Where conflict exists between specific conditions (found in Schedules A-D) and general conditions (Schedule F), the specific conditions supersede the general conditions.

Unless specifically authorized by this permit, by regulation issued by EPA, by another National Pollutant Discharge Elimination System permit, a Water Pollution Control Facilities permit, or by Oregon Administrative Rule, any other direct or indirect discharges to waters of the state are prohibited, including discharges to an underground injection control system.

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APPLICABILITY AND NOTIFICATION REQUIREMENTS

1. Entities Eligible for Coverage

Entities eligible for coverage under this permit are regulated small municipal separate storm sewer systems (MS4s) that discharge stormwater from their MS4 to surface waters of the state.

2. Permit Coverage Area

The permit applies to the geographic area served by the regulated small MS4 that is located fully, or partially, within an Urbanized Area in the State of Oregon as defined by a Decennial Census conducted by the U.S. Census Bureau. If the small MS4 is not located entirely within an Urbanized Area, only the portion that is within the Urbanized Area is considered the minimum permit coverage area.

3. Eligibility Requirements

a. Existing Registrants

Regulated small MS4 owners or operators (hereafter referred to as operators) listed below are currently covered by NPDES MS4 stormwater discharge permits, meet the eligibility requirements of this permit, submitted complete renewal applications, and are therefore not required to submit an application for coverage under this permit. Hereafter the following small MS4s are referred to as Existing Registrants:

i. City of Ashland
ii. City of Bend
iii. City of Corvallis
iv. City of Keizer
v. City of Medford
vi. City of Philomath
vii. City of Springfield
viii. City of Troutdale
ix. City of Turner
x. City of Wood Village
xi. Benton County
xii. Lane County
xiii. Marion County
xiv. Polk County
xv. City of Central Point
xvi. Rogue Valley Sewer Services - Co-Implementers (City of Phoenix, City of Talent, Jackson County, Rogue Valley Sewer Services)

b. New Registrants

Any operator of a regulated small MS4 not identified as an Existing Registrant above, that is not a permit registrant and seeks coverage under this permit, must submit a complete application for coverage under this permit in accordance with the application requirements listed below. An MS4 operator that has not been covered by an NPDES MS4 stormwater discharge permit prior to this MS4 Phase II general permit term is hereafter referred to as a new registrant.

The following new registrants have met the eligibility requirements for this permit, based on the 2010 Decennial Census:

i. City of Albany
ii. City of Eagle Point

iii. City of Grants Pass
iv. City of Millersburg
v. City of Rogue River
vi. Josephine County
vii. Linn County

Any new registrants that do not yet have permit coverage under this MS4 Phase II general permit must submit an application for permit coverage with the required fee within 30 days of the effective date of the permit modification.

4. Individual Permit

If coverage under this permit is denied, the permit registrant is unable to meet the terms and conditions of the general permit, or if the permit registrant does not wish to be regulated by this permit, the permit registrant must cease discharge or apply for an individual permit in accordance with Oregon Administrative Rule 340-045-0030.

a. Permit Registrant's Request for Individual Permit

Any small MS4 operator requesting coverage under an individual permit must submit an individual NPDES MS4 permit application to DEQ within 30 days of the effective date of the permit modification.

After the effective date of the general permit, any small MS4 operator requesting to be covered under an individual permit must submit an individual NPDES MS4 permit application to DEQ.

b. DEQ Individual Permit Decisions

DEQ may refuse to authorize or may revoke coverage under this permit and require the MS4 operator to apply for an individual NPDES MS4 permit in accordance with the procedures in OAR 340-045-0033(10). If that occurs, DEQ will notify the applicant or registrant in writing that an individual permit is required.

5. Discharge Authorization

When permit coverage is granted, DEQ will notify the permit applicant that the permit has been granted and that discharge is authorized.

6. Application Requirements

Any new registrant seeking authorization to discharge under this permit must submit a complete application to DEQ as outlined below.

a. Application Deadlines

i. New registrants seeking authorization to discharge under this permit must submit a complete application for new NPDES MS4 Phase II General Permit by January 30, 2019, unless DEQ notifies the applicant of a later application deadline.
ii. After the effective date of the general permit, new registrants that DEQ determines need permit coverage must submit a complete application for a new NPDES MS4 Phase II General Permit no later than 60 days after the date of DEQ's notification, unless DEQ provides the applicant a later date.

b. Application Form and Fee

The NPDES MS4 Phase II General Permit application form must be completed and signed in accordance with the signatory requirements of Schedule F. The application submittal must

include the application fee and annual fee for the first year of permit coverage according to OAR 340-045-0075, Table 70H.

c. Application Submittal

The applicant must submit a hard copy and an electronic copy of the complete application to DEQ at the following addresses:

Oregon Department of Environmental Quality
MS4 Stormwater Program, Attention: 7th Floor
700 NE Multnomah St., Suite 600
Portland, OR 97232

MS4Stormwater@deq.state.or.us (this email address can be used for electronic submittals)

d. Co-Applicants Under a Single Permit Application

A co-applicant is any small MS4 operator applying for this permit, in a cooperative agreement with at least one other applicant. Co-applicants must own or operate a small MS4 within or in proximity to another regulated small MS4.

Small MS4 operators may seek to obtain coverage under this permit as a co-applicant with one or more small MS4s eligible for this permit. In this instance, a single joint application, that includes all required information and certification signatures for each co- applicants, must be submitted to DEQ. See Schedule A.2 for permit registrant's Responsibilities.

7. Renewal Requirements

If the permit registrant intends to continue to operate under this permit after the permit expiration date, the permit registrant must submit a complete DEQ renewal application along with all other required documents to DEQ at least 180 days prior to permit expiration. DEQ will notify the permit registrant if the renewal application has been approved or denied.

8. Electronic System Use Requirement

Permit registrants must submit all required documents and payments using DEQ's electronic reporting system (Your DEQ Online) when directed to do so. Permit registrants unable to submit reports electronically (for example, those who do not have an internet connection) must contact DEQ to request a waiver. DEQ will notify the registrant in writing if an electronic waiver request is approved or denied.

Permit registrants who obtain a waiver not to use DEQ's electronic reporting system must use the reporting forms provided to them by DEQ, if applicable, and an additional fee may be assessed. DEQ may limit the duration of approved waivers from electronic reporting.

SCHEDULE A - EFFLUENT LIMITATIONS, CONDITIONS, AND STORMWATER MANAGEMENT PROGRAM

1. Authorized Discharges

Subject to the terms and conditions of this permit, the permit registrant is authorized to discharge municipal stormwater to surface waters of the state from its MS4, within the defined permit coverage area.

This permit also conditionally authorizes discharges from the permit registrant's MS4, which are categorized as allowable non-stormwater discharges in Schedule A.1.d.

a. Requirement to Reduce the Discharge of Pollutants

Pursuant to 40 CFR §122.34(a), the permit registrant must at a minimum develop, implement and enforce a Stormwater Management Program (SWMP) designed to reduce pollutants from the MS4 to the maximum extent practicable, to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act. This permit identifies the management practices, control techniques and system, and design and engineering methods necessary to meet this standard.

b. Water Quality Standards

Compliance with all permit requirements is deemed compliance with applicable water quality standards as established in OAR 340-041.

If the permit registrant or DEQ determines that a pollutant in the permit registrant's MS4 discharge is causing or contributing to an exceedance of an applicable water quality standard based on site-specific credible evidence, the permit registrant must take the following corrective actions:

i. Within 48 hours of becoming aware of or being notified of the exceedance, the permit registrant must begin to investigate the cause of the exceedance;

ii. Within 30 days of becoming aware of the exceedance, the permit registrant must notify DEQ in writing of the exceedance (for on-going or continuing exceedances, a single written notification will fulfill this requirement); and

iii. Within 60 days of becoming aware of or being notified of the exceedance, the permit registrant must submit a report to DEQ that documents the following:

(A) The results of the investigation, including the date the exceedance was discovered or the date the permit registrant was notified by DEQ;

(B) A description of the conditions that are known or suspected to have caused or contributed to the exceedance; and

(C) Corrective actions taken or planned, including the date corrective action was completed or is expected to be completed.

DEQ will review the report submitted and either approve it or require modifications. The permit registrant must implement the corrective action(s) in accordance with the schedule approved by DEQ. DEQ may require a timeline and enforceable milestones for completion of the corrective action plan. The details of all corrective actions implemented associated with Schedule A.1.b.iii must be included in the subsequent annual report.

If the exceedance is due to an illicit discharge and the permit registrant confirms the required response per Schedule A.3.c.v (B) occurred, the requirements listed in Schedule A. 1. B. i. ii. and

iii are not required, though the details of the illicit discharge and response must be included in the subsequent annual report.

If the permit registrant determines that the exceedance is already being addressed by actions associated with the implementation of a Total Maximum Daily Load, the permit registrant shall submit a report to DEQ with the next annual report that documents the following:

i. The results of the investigation, including the date the exceedance was discovered;

ii. A description of the conditions that are known or suspected to have caused or contributed to the exceedance; and

iii. The TMDL applicable requirements that are being implemented.

The details of all corrective actions implemented associated with Schedule A. 1. B. iii must be included in the subsequent annual report.

c. Limitations of Coverage

The permit does not authorize:

i. Stormwater discharges associated with industrial activities [as defined in 40 CFR §122.26(b)(14)] or stormwater associated with construction activities [as defined in 40 CFR §122.26(b)(14)(x) and (b)(15)]. Such discharges are regulated through DEQ's NPDES Industrial Stormwater General Permits and DEQ's NPDES Construction Stormwater General Permits; or another appropriate NPDES permit.
ii. Stormwater discharges to underground injection control (UIC) systems.

d. Allowable Non-Stormwater Discharges

The permit does not authorize the discharge of non-stormwater from the MS4, except where such discharges satisfy one of the following conditions:

i. The non-stormwater discharge is regulated under a separate NPDES permit.
ii. The non-stormwater discharge originates from emergency firefighting activities.
iii. The non-stormwater discharge is categorized as an authorized or allowable non-stormwater discharge listed below:

(A) Uncontaminated water line flushing.
(B) Landscape irrigation. For permit registrant owned or operated areas landscape irrigation will be considered allowable only if pesticides and fertilizers are applied in accordance with the manufacturer's instructions.
(C) Diverted stream flows.
(D) Uncontaminated groundwater infiltration (as defined at 40 CFR § 35.2005(20)) to separate storm sewers.
(E) Rising groundwaters.
(F) Uncontaminated pumped ground water.
(G) Potable water sources (including potable groundwater monitoring wells and draining and flushing of municipal potable water storage reservoirs).
(H) Start up flushing of groundwater wells.
(I) Foundation, footing and crawlspace drains (where flows are not contaminated [i.e., process materials or other pollutant]).
(J) Uncontaminated air conditioning or compressor condensate.
(K) Irrigation water.
(L) Springs.
(M) Lawn watering.
(N) Individual residential car washing.

(O) Charity car washing (provided that chemicals, soaps, detergents, steam or heated water are not used. Washing is restricted to the outside of the vehicle, no engines, transmissions or undercarriages).
(P) Flows from riparian habitats and wetlands.
(Q) Dechlorinated swimming pool discharges including hot tubs (heated water must be cooled for at least 12 hours prior to discharge).
(R) Fire hydrant flushing.
(S) Street and pavement washwaters (provided that chemicals, soaps, detergents, steam or heated water are not used).
(T) Routine external building wash-down (provided that chemicals, soaps, detergents, steam or heated water are not used).
(U) Water associated with dye testing activity.
(V) Discharges of treated water from investigation, removal and remedial actions selected or approved by DEQ pursuant to Oregon Revised Statutes (ORS) Chapter 465.

If any of these allowable non-stormwater discharges are or become a significant source of pollutants, the permit registrant must prohibit that discharge or require implementation of appropriate BMPs to reduce the discharge of pollutants associated with the source before discharge to the MS4.

2. Permit Registrant's Responsibilities

Each permit registrant is responsible for permit compliance related to the permit registrant's permit coverage area, or where this permit requires the specific permit registrant to take an action.

a. Coordination Among Registrants and Joint Agreements

i. If MS4 operators elect to submit a joint application, each co-registrant is jointly responsible for permit compliance. If a single MS4 operator elects to submit an application for multiple registrants (commonly referred to as co-implementers), the sole applicant is solely responsible for permit compliance for each of the co-implementers.
ii. A permit registrant may elect to work with or delegate implementation of one or more stormwater management program control measures to another permit registrant or entity. The permit registrant remains responsible for compliance with any permit conditions that another permit registrant or entity fails to implement.
iii. If a permit registrant elects to work with or delegate implementation of one or more SWMP control measures to another permit registrant or entity, there must be a written agreement between the permit registrant and the other permit registrant or entity memorializing the delegation. This agreement must be made available to DEQ upon request.

b. Maintain Adequate Legal Authority

No later than September 1, 2023, the permit registrant must adopt, update, and maintain adequate legal authority through ordinance(s), code(s), interagency agreement(s), contract(s), and/or other mechanisms to control pollutant discharges into and discharges from its MS4 and to implement and enforce the conditions of this permit, to the extent allowable pursuant to the respective authority granted under state law. [1]

If existing ordinances or regulatory mechanisms are insufficient to meet the criteria required by this permit, the permit registrant must adopt new ordinances. If the permit registrant does not have the authority to adopt ordinances, the permit registrant must utilize all relevant regulatory mechanisms available to it as allowed pursuant to applicable state law.

[1] This deadline is extended to February 28, 2024 for: Albany, Corvallis, Millersburg, Springfield, and Turner.

c. SWMP Document

The permit registrant must maintain a written Stormwater Management Program Document (referred to as the SWMP Document), which describes in detail how the permit registrant complies with the required control measures in this permit. The SWMP Document must be reviewed and, if necessary, updated annually and must describe the permit registrant's schedule for implementation of any control measure components to be developed during the term of this permit.

The permit registrant's SWMP Document must be submitted with the second annual report, and made available to the public through the permit registrant's publicly accessible website.[2]

d. SWMP Information and Metrics

The permit registrant must maintain a method of gathering, tracking, and using SWMP information to set priorities, and assess its compliance. Permit registrants must track activities and document program outcomes to illustrate progress on the SWMP control measures (for example, the number of inspections, official enforcement actions, and/or types of public education actions, etc.), and cite relevant information and metrics, reflecting the specific reporting period, in each annual report.

e. SWMP Resources

The permit registrant must provide finances, staff, equipment and/or other support capabilities to implement the control measures and other requirements outlined in this permit.

3. Stormwater Management Program Control Measures

Existing registrants must continue to implement all existing SWMP control measures, and, after the effective date of the permit, must begin to revise their SWMP control measures, as needed, in order to implement any new control measure components required by the implementation deadline specified for that control measure in Table 1 below.

New registrants, upon the effective date of this permit, must begin to develop and implement the SWMP control measures outlined in Schedule A.3.a-f and must fully implement all applicable SWMP control measures no later than September 1, 2023.[3] Any new registrant authorized to discharge after the effective date of this permit must fully implement all applicable SWMP control measures in accordance with the implementation schedule established in their discharge authorization letter.

Table 1. SWMP Control Measures Implementation Schedule[4]

SWMP Control Measures	Implementation Deadline	
	Existing Registrants	New Registrants
Public Education and Outreach	February 28, 2020	September 1, 2023
Public Involvement and Participation	February 28, 2020	September 1, 2023
Illicit Discharge Detection and Elimination	February 28, 2022	September 1, 2023
Construction Site Runoff Control	February 28, 2023	September 1, 2023

[2] This deadline is extended to three years after permit coverage assignment for: Albany, Millersburg, and Turner.

[3] This deadline is extended to February 28, 2024 for: Albany, Corvallis, Millersburg, Springfield, and Turner.

[4] These deadlines are extended to February 28, 2024 for: Albany, Corvallis, Millersburg, Springfield, and Turner.

SWMP Control Measures	Implementation Deadline	
	Existing Registrants	New Registrants
Post-Construction Site Runoff for New Development and Redevelopment	February 28, 2023	September 1, 2023
Pollution Prevention and Good Housekeeping for Municipal Operations	February 28, 2022	September 1, 2023

a. Public Education and Outreach

The permit registrant must conduct an ongoing education and outreach program to inform the public about the impacts of stormwater discharges on waterbodies and the steps that they can take to reduce pollutants in stormwater runoff. The education and outreach program must be designed to address stormwater issues of significance within the permit registrant's community.

i. Implementation Dates

(A) Existing Registrants

No later than February 28, 2020, existing registrants must implement the required components described in Schedule A.3.a.ii-vi. [5]

(B) New Registrants

Upon the effective date of this permit, new registrants must begin to develop and implement the required components described in Schedule A.3.a.ii-vi; required components must be fully implemented by September 1, 2023. [6]

ii. Education and Outreach Program

The permit registrant's public education and outreach program must include educational efforts targeting the three audiences listed in Schedule A.3.a.iv. The goal of the education and outreach program is to reduce the behaviors and practices that cause or contribute to adverse stormwater impacts on receiving waters. The program should promote specific actions to increase audience understanding of how to reduce pollutant discharges in stormwater runoff and prevent illicit discharge from entering the MS4 and impacting receiving waters.

To be considered adequate, the public education and outreach program must include the activities in Schedule A.3.a.iii-vi below.

iii. Stormwater Education Activities

The permit registrant must distribute or offer at least two (2) educational messages or activities per year.

Educational messages or activities may include printed materials (for example, brochures or newsletters); electronic materials (for example, social media, websites or e-newsletters); mass media (for example, utility bill inserts, transit advertisements, newspaper articles or public service announcements); targeted workshops, or other educational events or formats.

The permit registrant may use existing materials if applicable. The permit registrant may develop its own educational materials and means of delivering its message(s). Based on the

[5] This deadline is extended to February 28, 2024 for: Corvallis, Springfield, and Turner.
[6] This deadline is extended to February 28, 2024 for: Albany and Millersburg.

target audience's demographic, the permit registrant must consider delivering its selected messages and/or activities in an appropriate manner and in language(s) other than English.

iv. Target Audiences and Topics

The permit registrant must at minimum, conduct education and outreach to each target audience identified below at least once during the permit term, construction site operators must be targeted at least twice. The permit registrant must focus its efforts on conveying relevant messages using the target topics identified below or stormwater issues of significance in their community.

(A) Target Audiences:

1. General public, homeowners, homeowner association, schoolchildren, and businesses (including home-based and mobile business).
2. Local elected officials, land use planners and engineers.
3. Construction site operators (See Schedule A.3.a.v below).

(B) Target Topics:

1. Impacts of illicit discharges on receiving waters and how to report them.
2. Impacts from impervious surfaces and appropriate techniques to avoid adverse impacts.
3. Best management practices for proper use, application and storage of pesticides and fertilizers.
4. Best management practices for litter and trash control.
5. Best management practices for recycling programs.
6. Best management practices for power washing, carpet cleaning and auto repair and maintenance.
7. Low-impact development/green infrastructure.
8. Septic systems, information pertaining to maintenance of septic systems.
9. Watershed awareness and how storm drains lead to local creeks and rivers, and potential impacts to fish and other wildlife.
10. Stormwater issues of significance identified by permit registrant.

v. Education on Construction Site Control Measures

At least twice during the permit term, the permit registrant must conduct educational outreach to target construction site operators working within their community. Topics should include appropriate selection, design, installation, use and maintenance of construction site control measures required by the permit registrant's relevant ordinances or other regulatory mechanisms.

vi. Tracking and Assessment

The permit registrant must track implementation of the public education and outreach requirements. In each corresponding annual report, the permit registrant must assess their progress toward implementation of the program, including the evaluation of at least one education and outreach activity corresponding to the reporting timeframe for the associated annual report. The assessment(s) should be used to inform future stormwater education and outreach efforts to most effectively convey the educational material to the target audience(s).

b. Public Involvement and Participation

The permit registrant must implement a public involvement and participation program that provides opportunities for the public to effectively participate in the development of the SWMP

control measures. The permit registrant must comply with their public notice requirements when implementing a public involvement and participation process.

i. Implementation Dates

(A) Existing Registrants

No later than February 28, 2020, existing registrants must implement the required components described in Schedule A.3.b.ii-iv. [7]

(B) New Registrants

Upon the effective date of this permit, new registrants must begin to develop and implement the required components described in Schedule A.3.b.ii-iv; required components must be fully implemented by September 1, 2023.[8]

ii. Publicly Accessible Website

The permit registrant must maintain and promote at least one publicly accessible website with information on the permit registrant's SWMP implementation, the SWMP Document, contact information, and educational materials. The website must be maintained with current information, and be updated at least annually. The permit registrant's website must incorporate the following:

(A) Illicit Discharge Complaint or Report requirements (see Schedule A.3.c.v).

(B) Draft documents issued for public comment, final reports, plans and other official SWMP policy documents.

(C) Links to all ordinances, policies and/or guidance documents related to the construction and post-construction stormwater management control programs, including education, training, licensing, and permitting.

(D) The permit registrant's contact information for relevant staff, including phone numbers, mailing addresses and email addresses.

iii. Stewardship Opportunity

The permit registrant must, at a minimum, create or partner in the development of one stewardship opportunity during the permit term. The permit registrant may consider one of the following stewardship opportunities or a more locally relevant opportunity:

(A) Stream team activities,

(B) Storm drain marking or stenciling,

(C) Volunteer monitoring,

(D) Riparian plantings/facility enhancement,

(E) Neighborhood low-impact development activities,

(F) Adopt-A-Road,

(G) Citizen advisory committee, or

(H) Other locally relevant opportunities.

iv. Tracking and Assessment

The permit registrant must track implementation of the public involvement and participation requirements. In each corresponding annual report, the permit registrant must assess their progress towards implementation of the program.

[7] This deadline is extended to February 28, 2024 for: Corvallis, Springfield, and Turner.
[8] This deadline is extended to February 28, 2024 for: Albany and Millersburg.

c. Illicit Discharge Detection and Elimination

The permit registrant must implement and enforce a program to detect and eliminate illicit discharges into the MS4, to the extent allowable by state laws. An illicit discharge is any discharge to an MS4 that is not composed entirely of stormwater. Conditional exceptions are identified in Schedule A.1.d.

i. Implementation Dates

(A) Existing Registrants

No later than February 28, 2022, existing registrants must implement all of the required components described in Schedule A.3.c.ii-viii. [9]

(B) New Registrants

Upon the effective date of this permit, new registrants must begin to develop and implement the required components described in Schedule A.3.c.ii-viii; all required components must be fully implemented by September 1, 2023. [10]

ii. MS4 Map

(A) MS4 Map and Digital Inventory

The permit registrant must develop and maintain a current map of their MS4. The MS4 map and digital inventory must include the location of outfalls and an outfall inventory, conveyance system and structural stormwater control locations, and chronic illicit discharges (see Schedule A.3.c.ii.B-D). The permit registrant must delineate their MS4 by storm sewer drainage basin, as appropriate, and identify the location and characteristics of any ongoing dry weather flows.

(B) Outfall Inventory

The permit registrant must maintain an inventory of all the known outfall locations, owned or operated by the permit registrant. The outfall location must include a unique identifier (for example, alphanumeric code identifier), any geographic information (for example, streets, manholes, or milepost markers) necessary to locate these outfalls in the field, and the name(s) of the receiving water(s).

(C) Conveyance System and Structural Stormwater Control Locations

The permit registrant must maintain a map of the MS4 collection system and all known structural stormwater controls. Where applicable, features must include a unique identifier (for example, alphanumeric code identifier) and any geographic information (for example, streets, manholes, or milepost markers) necessary to locate these features in the field.

(D) Chronic Illicit Discharges

If applicable, the permit registrant must include the location(s) of known chronic illicit discharge(s).

The permit registrant must make map(s) and digital inventories available to DEQ upon request. When in digital format, the permit registrant must fully describe mapping standards in the SWMP document.

[9] This deadline is extended to February 28, 2024 for: Corvallis, Springfield, and Turner.
[10] This deadline is extended to February 28, 2024 for: Albany and Millersburg.

Existing registrants must submit their MS4 map with the third annual report. New registrants must submit their MS4 map by September 1, 2023.[11] Prior to this date, all existing maps (including GIS data layers) must be shared with DEQ upon request.

iii. Ordinance and/or Other Regulatory Mechanisms

The permit registrant must prohibit non-stormwater discharges into the MS4 (except those conditionally allowed by Schedule A.1.d) through enforcement of an ordinance or other regulatory mechanism, to the extent allowable under state law. The permit registrant must implement appropriate enforcement procedures and actions to ensure compliance. The ordinance or other regulatory mechanism must also define the range of illicit discharges it covers including, but not limited to the following:

(A) Septic, sewage, and dumping or disposal of liquids or materials other than stormwater into the MS4;
(B) Discharges of washwater resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities;
(C) Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility, including motor vehicles, cement-related equipment, and port-a-potty servicing, etc.;
(D) Discharges of washwater from mobile operations, such as mobile automobile or truck washing, steam cleaning, power washing, and carpet cleaning, etc.;
(E) Discharges of washwater from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, or residential areas (including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.) where detergents are used and spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
(F) Discharges of runoff from material storage areas, which contain chemicals, fuels, grease, oil, or other hazardous materials from material storage areas;
(G) Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water;
(H) Discharges of sediment, unhardened concrete, pet waste, vegetation clippings, or other landscape or construction-related wastes;
(I) Discharges of trash, paints, stains, resins, or other household hazardous wastes; and
(J) Discharges of food-related wastes (grease, restaurant kitchen mat and trash bin washwater, etc.).

iv. Enforcement Procedures

The permit registrant must develop, implement and maintain a written escalating enforcement and response procedure. The procedure must address repeat violations through progressively stricter responses, as needed to achieve compliance. The escalating enforcement and response procedure must describe how the permit registrant will use enforcement techniques to ensure compliance. The enforcement procedures must include timelines for compliance and, when formulating response procedures, must consider factors such as the amount of pollutant discharged, the type of pollutant discharged, and whether the discharge was intentional or accidental.

[11] This deadline is extended to February 28, 2024 for: Albany, Millersburg, Corvallis, Springfield, and Turner.

For existing registrants the escalating enforcement procedure must be submitted with the third annual report. [12]New registrants must submit the escalating enforcement procedure by September 1, 2023. [13]

v. Program to Detect and Eliminate Illicit Discharges

At a minimum, the permit registrant's program must include the following activities:

(A) Illicit Discharge Complaints or Reports

The permit registrant must publicize a phone number, webpage, and/or other communication channel that the public can use to report illicit discharges. The complaint/reporting communication channel must be answered or responded to by trained staff during normal business hours and must include a system to record or capture incoming complaints or reports during non-business hours.

(B) Response to Complaints or Reports

The permit registrant must respond to all complaints or reports of illicit discharges to the permitted MS4, as soon as possible, or within an average of two working days from the initial time of the permit registrant's knowledge of the complaint or report, unless there is a threat to human health, welfare, or the environment. For discharges, including spills, which constitute a threat to human health, welfare, or the environment, the permit registrant must respond within 24 hours of the permit registrant's knowledge of the threat. Spills, or other illicit discharges, that may endanger human health or the environment must be reported in accordance with all applicable federal and state laws, including notification to the Oregon Emergency Response System (800-452-0311).

The permit registrant's complaint response and the associated investigation must at minimum, use the following timelines:

1. Initial Investigation or Evaluation

   Conduct an initial investigation or evaluation within an average of five working days or refer the complaint to the appropriate agency (see Schedule A.3.c.v.C below).

2. Ongoing Illicit Discharges

   If the elimination of the illicit discharge will take more than 15 working days due to technical, logistical, or other reasonable issues, the permit registrant must within 20 working days of identifying the source, initiate procedures to eliminate the illicit discharge.

   Upon confirmation of an illicit connection, the permit registrant must use the enforcement procedures in a documented effort to eliminate the illicit connection within six months to the extent allowable under state law. All known illicit connections to the MS4 must be eliminated.

3. Ongoing Illicit Discharges involving Capital Improvements

   If the elimination of the illicit discharge involves the repair or replacement of the permit registrant's wastewater or storm sewer conveyance systems, the permit registrant must remove the source of the illicit discharge within three years of the date of its identification unless the permit registrant receives approval from DEQ for a different

[12] This deadline is extended to February 28, 2024 for: Corvallis, Springfield, and Turner.
[13] This deadline is extended to February 28, 2024 for: Albany and Millersburg.

timeframe that is based on project-specific information and documentation of best efforts to meet the three-year timeframe.

(C) Notification of Other Authorities

If the illicit discharge originates outside the permit registrant's jurisdictional authority, the permit registrant must notify the jurisdictional authority within five working days of becoming aware of the illicit discharge.

(D) Complaints Tracking

The permit registrant must maintain a procedure or system to document all complaints or reports of illicit discharges into and from the MS4. The tracking system must document, at minimum the following:

1. Date the complaint was received and, if available, the complainant's name and contact information.
2. Name of staff responding to the complaint.
3. Date the investigation was initiated.
4. The outcome of the staff investigation.
5. Corrective action(s) taken to eliminate the illicit discharge.
6. The responsible party for the corrective action(s).
7. The status of enforcement procedure(s), when necessary.
8. The date the corrective action(s) was completed and staff that evaluated final compliance.

Complaint tracking information must be summarized in each annual report.

vi. Dry Weather Screening Program

At a minimum, the permit registrant must conduct dry weather screening at the following percentages:

(A) Existing Registrants

Existing registrants must conduct dry weather screening of at least 40 percent of their MS4 outfalls no later than February 28, 2022. Subsequently, existing registrants must conduct dry weather screening at an additional 20 percent of their MS4 outfalls each year thereafter. [14]

(B) New Registrants[15]

New registrants must conduct dry weather screening of at least 25 percent of their MS4 outfalls no later than September 1, 2023, then an additional 20 percent each year thereafter.

Once all the known outfalls are inspected, or if all the known outfalls have been previously screened, the permit registrant must identify and document priority locations. The 20 percent annual field screening must include a portion of all of the permit registrant's identified priority locations.

(C) Annual Field Screening of Priority Locations

Priority locations must, when possible, be located at an accessible location downstream of any source of suspected illegal or illicit activity or location as identified by the permit registrants. Priority locations must be based on an

[14] Corvallis, Springfield, and Turner must conduct dry weather screening of at least 40 percent of their MS4 outfalls no later than February 28, 2024.

[15] Albany and Millersburg must conduct dry weather screening of at least 25 percent of their MS4 outfalls no later than February 28, 2024.

equitable consideration of hydrological conditions, total drainage area of the location, population density of the location, traffic density, age of the structures or buildings in the area, history of the area, land use types, personnel safety, accessibility, historical complaints or other appropriate factors as identified by the permit registrant.

The dry-weather field screening activities must occur after an antecedent dry period of at least 72-hours. The dry-weather field screening activities must be documented and include:

(D) General Observations

General observations must include visual presence of flow, turbidity, oil sheen, trash, debris or scum, condition of conveyance system or outfall, color, odor and any other relevant observations related to the potential presence of non-storm water or illicit discharges.

(E) Field Screening and Analysis

If flow is observed, and the source is unknown, a field analysis must be conducted to determine the cause of the dry-weather flow. The field analysis must include sampling for pollutant parameters that are likely to be found based upon the suspected source of discharge or by other effective investigatory approaches or means to identify the source or cause of the suspected illicit discharge. Where appropriate, field screening pollutant parameter action levels, identified by the permit registrant, must be considered.

(F) Pollutant Parameter Action

The permit registrant must develop or identify pollutant parameter action levels to be used as part of the field screening. The pollutant parameter action levels and rationale must be documented in an enforcement response plan (or similar document) or in the SWMP Document. The permit registrant may use the following as indicator constituents: ammonia, biochemical oxygen demand, pH, total chlorine, detergents as surfactants, E. coli, total phosphorus, turbidity, temperature, and total suspended solids.

Existing registrants must submit their pollutant parameter action levels with the third annual report.[16] New registrants must submit the pollutant parameter action levels by September 1, 2023.[17]

(G) Laboratory Analysis

If general observations and field screening indicate an illicit discharge and the presence of a suspected illicit discharge cannot be identified through other investigatory methods, the registrant must collect a water quality sample for laboratory analyses for ongoing discharges. The water quality sample must be analyzed for pollutant parameters or identifiers that will aid in the determination of the source of the illicit discharge. The types of pollutant parameters or identifiers may include, but are not limited to genetic markers, industry-specific toxic pollutants, or other pollutant parameters that may be specifically associated with a source type.

vii. Illicit Discharge Detection and Elimination Training and Education

[16] This deadline is extended to February 28, 2024 for: Corvallis, Springfield, and Turner.

[17] This deadline is extended to February 28, 2024 for: Albany and Millersburg.

The permit registrant must ensure that all persons responsible for investigating and eliminating illicit discharges and illicit connections into the MS4 are appropriately trained to conduct such activities. All staff directly responsible for conducting dry weather screening activities or responding to reports of illicit discharges and spills into the MS4 must be properly trained to conduct such activities.

The permit registrant must provide orientation and training to all new staff working to implement the IDDE program within 30 days of their assignment to this program. All staff must receive training at least once during the permit term. The permit registrant must provide follow-up training as procedures or technology utilized in this program change.

viii. Tracking and Assessment

The permit registrant must track implementation of the IDDE program requirements. In each corresponding annual report, the permit registrant must assess their progress towards implementation of the program.

d. Construction Site Runoff Control

The permit registrant must implement and enforce a construction site runoff control program to reduce discharges of pollutants from construction sites in its coverage area. Existing permit registrants must continue to implement their construction site runoff program as they develop, and implement the requirements of Schedule A.3.d.

i. Implementation Dates

(A) Existing Registrants[18]

No later than February 28, 2023, Existing Registrants must implement all of the required components described in Schedule A.3.d.ii-ix.

(B) New Registrants[19]

Upon the effective date of this permit, New Registrants must begin to develop and implement the required components described in Schedule A.3.d.ii-ix; and all required components must be fully implemented by September 1, 2023.

ii. Ordinance and/or Other Regulatory Mechanism

Through ordinance or other regulatory mechanism, to the extent allowable under state law, the permit registrant must require erosion controls, sediment controls, and waste materials management controls to be used and maintained at all qualifying construction projects from initial clearing through final stabilization to reduce pollutants in stormwater discharges to the MS4 from construction sites.

The permit registrant must require construction site operators to complete and implement an Erosion and Sediment Control Plan (ESCP) for construction project sites that results in a minimum land disturbance of:

(A) For Large Communities, 7,000 square feet or more; and

(B) For Small Communities, 10,890 square feet (a quarter of an acre) or more.

The permit registrant must use appropriate enforcement procedures and actions to ensure compliance with Schedule A.3.d.ii-vi.

iii. Compliance with Other NPDES Permits

[18] This deadline is extended to February 28, 2024 for: Corvallis, Springfield, and Turner.
[19] This deadline is extended to February 28, 2024 for: Albany and Millersburg.

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), the permit registrant must refer project sites to DEQ, or the appropriate DEQ agent, to obtain NPDES Construction Stormwater Permit coverage. The NPDES Construction Stormwater General Permit requirements are in addition to the permit registrant's construction site runoff control requirements identified in this permit (Schedule A.3.d.iv).

iv. Erosion and Sediment Control Plans

The permit registrant must maintain written specifications that address the proper installation and maintenance of such controls during all phases of construction activity occurring in their coverage area. At a minimum, the written specifications must include an erosion and sediment control plan, or ESCP template, worksheet or similar document for construction site operators to document how erosion, sediment, and waste material management controls will be implemented at the construction project site. At a minimum, through ordinance or other regulatory mechanism the permit registrant must:

(A) Provide the construction site operator an ESCP template prior to commencement of construction/land disturbance;

(B) Require construction site operator to complete a site-specific ESCP prior to commencement of construction/land disturbance;

(C) Require the ESCP be maintained and updated as site conditions change, or as needed; and

(D) Require ESCPs to be kept on site and made available for review by the permit registrant, DEQ, or another administrating entity.

The ESCP must, at a minimum consist of sizing criteria, performance criteria, design specifications, and guidance on selection and placement of controls, and specifications for long term operation and maintenance, including appropriate inspection interval and self-inspection checklists for use by the construction site operator.

v. Erosion and Sediment Control Plans Review

At a minimum, the permit registrant must review ESCPs from construction projects that will result in land disturbance of 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) using a checklist or similar document to determine compliance with the ordinance or other regulatory mechanism required.

ESCP review procedures must include consideration of the construction activities' potential water quality impacts, and remain in accordance with applicable state and local public notice requirements.

vi. Construction Site Inspections

The permit registrant must inspect construction sites to ensure compliance with Schedule A.3.d.iii-iv.

(A) Minimum Triggers for Inspection

At a minimum, the permit registrant must inspect construction sites if:

1. The construction activity will result in land disturbance of 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). Each site must be inspected at least once during the permit term;

2. Sediment is visible or reported in stormwater discharge or dewatering activities from the construction site; or
3. A complaint or report is received. At minimum, the permit registrant must respond to the initial complaint if more than one report or complaint is received.

(B) Minimum Inspection Documentation Requirements

If the permit registrant inspects a construction site, at a minimum the site inspection must include and document the following:

1. A review and evaluation of the ESCP to determine if the described control measures were installed, implemented and maintained properly.
2. An assessment of the site's compliance with the permit registrant's ordinances or requirements, including the implementation and maintenance of required control measures.
3. Visual observations and documentation of any existing or potential non-stormwater discharges, illicit connections, and/or discharge of pollutants from the site. Documentation of recommendations to the construction site operator for follow-up.
4. If necessary, education or instruction provided to the construction site operator related to additional stormwater pollution prevention practices to comply with the approved ESCP.
5. A written or electronic inspection report, including documentation of all necessary follow-up actions (i.e., re-inspection, enforcement) to ensure compliance with their applicable requirements.

(C) Inspection Requirements for Existing Large Communities

In addition to Schedule A.3.d.vi.A, existing large communities must inspect at least 25% of the qualifying new construction sites that disturb less than one acre at least once during the permit term to ensure compliance with the site's ESCP.

vii. Enforcement Procedures

The permit registrant must 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. The escalating enforcement and response procedure must describe how the permit registrant will use enforcement techniques to ensure compliance. The enforcement procedures must include timelines for compliance and, when formulating response procedures, must consider factors such as the amount of pollutant discharged, the type of pollutant discharged, and whether the discharge was intentional or accidental. For existing registrants, the escalating enforcement procedure must be submitted with the third annual report.[20] New registrants must submit the escalating enforcement procedure by September 1, 2023.[21]

viii. Construction Runoff Control Training and Education

[20] This deadline is extended to February 28, 2024 for: Corvallis, Springfield, and Turner.

[21] This deadline is extended to February 28, 2024 for: Albany and Millersburg.

The permit registrant must ensure that all staff responsible for ESCP reviews, site inspections, and enforcement of the permit registrant's requirements are trained or otherwise qualified to conduct such activities.

The permit registrant must provide orientation and training to all new staff working to implement the construction runoff control program within 30 days of their assignment to this program. The staff must be properly trained and knowledgeable in the technical understanding of erosion, sediment, and waste material management controls to conduct such ESCP reviews and inspections. All staff must receive training at least once during the permit term. The permit registrant must provide follow-up training as procedures and/or technology utilized in this program change.

ix. Tracking and Assessment

The permit registrant must track implementation of the construction site runoff program's required activities. In each corresponding annual report, the permit registrant must assess their progress toward implementing the construction site runoff program's control measures.

e. Post-Construction Site Runoff for New Development and Redevelopment

Existing permit registrants must continue to implement their post-construction stormwater pollutant control program as they develop programs to meet the requirements of Schedule A.3.e to reduce discharges of pollutants and address stormwater runoff from new development and redevelopment project sites in its coverage area. New registrants must develop programs to meet Schedule A.3.e requirements to reduce discharges of pollutants and address stormwater runoff from new development and redevelopment project sites in its coverage area.

All registrants must describe their programs in the SWMP Document.

i. Implementation Deadline

(A) Existing Registrants

No later than February 28, 2023, existing registrants must implement all of the required components described in Schedule A.3.e.ii-viii. [22]

(B) New Registrants

Upon the effective date of the permit, new registrants must begin to develop and implement the required components described in Schedule A.3.e.ii-viii; all required components must be fully implemented by September 1, 2023. [23]

ii. Ordinance and/or Other Regulatory Mechanism

Through ordinance or other regulatory mechanism, to the extent allowable under state and federal law, the permit registrant must require the following for project sites discharging stormwater to the MS4 that create or replace 5,000 square feet or more of impervious surface area:[24]

(A) The use of structural stormwater controls at all qualifying sites.

(B) A site-specific stormwater management approach that targets natural surface or

[22] This deadline is extended to February 28, 2024 for: Corvallis, Springfield, and Turner.

[23] This deadline is extended to February 28, 2024 for: Albany and Millersburg.

[24] For counties, through ordinance or other regulatory mechanism, to the extent allowable under state law, the permit registrant must require the following for project sites discharging stormwater to the MS4 that create or replace 10,890 square feet (a quarter of an acre) or more of new impervious surface area.

predevelopment hydrological function through the installation and long-term operation and maintenance of structural stormwater controls.

(C) Long-term operation and maintenance of structural stormwater controls at project sites that are under the ownership of a private entity.

The permit registrant must use appropriate enforcement procedures and actions to ensure compliance with Schedule A.3.e.iv. The local ordinance or other regulatory mechanism adopted must meet the requirements of Schedule A.3.e.ii-vi.

iii. Removing Barriers to Low Impact Development

The permit registrant must identify, minimize or eliminate ordinance, code and/or development standard barriers within their legal authority that inhibit design and implementation techniques, such as Low Impact Development and Green Infrastructure, intended to minimize impervious surfaces and reduce stormwater runoff. Consideration of such modifications to ordinance, or codes are only required to the extent the modifications are permitted under federal and state laws.

The permit registrant must review ordinance, code and development standards for barriers by September 1, 2023. If an ordinance, code or development standard barrier is identified at any time subsequent to September 1, 2023, the applicable ordinance, code or development standard must be modified within three years.[25]

iv. Post-Construction Stormwater Management Requirements

The permit registrant must develop enforceable post-construction stormwater management requirements in ordinance or other regulatory mechanism that, at a minimum, include the following technical standards:

(A) Site Performance Standard

The permit registrant must establish a site performance standard with a Numeric Stormwater Retention Requirement (NSRR) to target natural surface or predevelopment hydrologic function to retain rainfall on-site and minimize the offsite discharge of precipitation utilizing structural stormwater controls that infiltrate, capture and/or evapotranspirate stormwater. This NSRR volume must be determined by the use of one of the following:

1. Volume-based method (for example, the first inch of each storm event).
2. Storm event percentile-based method (for example, the 95th percentile storm event- 95% of the time the data is below this value).
3. Annual average runoff-based method (for example 80% of annual average runoff).

The site performance standard is met when 100% of the NSRR volume (determined by the method chosen above) from the project site is routed to one or more structural stormwater controls with sufficient capacity to accommodate this stormwater runoff and will fully infiltrate (after any necessary treatment), evapotranspirate and/or be reused onsite without stormwater runoff discharging from the site. Evapotranspiration and reuse can be used to meet the retention

[25] Albany, Corvallis, Millersburg, Springfield, and Turner must review ordinance, code and development standards for barriers, and make necessary amendments to minimize or eliminate the barriers, at least once within the permit term.

requirements but are not required prior to pursuing treatment or alternative compliance options discussed below.

At sites where 100% of the NSRR volume cannot be retained due to technical infeasibility and/or site constraints, the permit registrant may develop an exception process for the retention in the site performance standard by following the Step-Wise Alternative Compliance procedure outlined below (see Schedule A.3.e.iv.B and C). Such feasibility or site constraint factors may include, but are not limited to, shallow bedrock, high groundwater, groundwater contamination, soil instability as documented by geotechnical analysis, or a land use that is inconsistent with capture, and infiltration of stormwater.

(B) Treatment Standard

1. For projects that are unable to fully meet the NSRR, the remainder of the rainfall/runoff associated with this retention requirement must be treated prior to discharge with a structural stormwater control. This stormwater structural control must be designed to remove a defined percentage of total suspended solids and may include an upper and lower bound to their treatment requirement that reflect the practical limitation of an engineered control (e.g., 80% removal of TSS for typical influent concentrations ranging from 100mg/L to 200 mg/L). The permit registrant should establish treatment requirements that target the equivalent water quality benefits as onsite retention of stormwater from new development or redevelopment sites using a model, such as a continuous simulation model or other evaluation tool. The permit registrant should encourage the use of treatment trains of structural post-construction stormwater controls, and must give priority to implementing green infrastructure before considering hardscaped structural stormwater controls for stormwater treatment. **Detention ponds are not a sufficient stand-alone treatment method and must be combined with other structural stormwater controls**. Treating the volume of water that would otherwise be retained under the NSRR satisfies the retention requirement.

2. Structural Stormwater Control Design and Specifications

   For sites that utilize the treatment option to satisfy the NSRR, the permit registrant must provide a description of all allowable structural stormwater controls including site-specific design requirements, design requirements that do not inhibit maintenance, conditions where each control applies, and operation and maintenance standards for each control. The permit registrant must identify conditions where the implementation of green infrastructure or equivalent approaches may be impracticable.

   A permit registrant may adopt specifications created by another entity that complies with this requirement.

(C) Offsite Mitigation Alternative Compliance

For projects unable to fully meet the NSRR and/or treatment standard alternative, the permit registrant may choose to allow offsite alternatives for projects based on factors of technical infeasibility or site constraints. The determination that the NSRR and/or treatment standards cannot be achieved at the project site must be based on review criteria and cannot be based solely on increased cost. The offsite alternatives must account for retention or treatment at least equal to the NSRR volume not met onsite.

For project sites requesting alternative compliance, the permit registrant must require and subsequently evaluate the written technical justification documenting the infeasibility or site constraints, which prevent the onsite management of the runoff amount stipulated in the NSRR. The written technical justification must be in the form of a site-specific hydrologic or design analysis conducted and endorsed by an Oregon registered Professional Engineer or Oregon Certified Engineering Geologist.

If the permit registrant agrees that alternative compliance with the retention requirement is necessary, meaning retention of or treatment up to the NSRR volume is not feasible, the permit registrant must require that the site operator use one or more of the stormwater mitigation options outlined in the Offsite Stormwater Mitigation Options below for any portion of the NSRR not retained or treated.

(D) Offsite Stormwater Mitigation Options

If the permit registrant chooses to develop mitigation options for alternative compliance, such options may include, but are not limited to a payment-in lieu program or other option that matches the water quality goal of the NSRR at any given site. Before allowing offsite alternative compliance with the NSRR, the permit registrant must establish stormwater mitigation options for alternative compliance, including institutional standards and management systems to value, estimate, and account for how these mitigation projects address the unmet volume of the stormwater specified in this retention requirement. The mitigation project or site must be within the same subwatershed as the site undergoing development. Stormwater mitigation options must include one or more of the following for alternative compliance:

1. Offsite Mitigation

   General offsite mitigation options may include meeting the retention requirement at another location, the use of a stormwater mitigation bank program, the use of stormwater payment-in-lieu program, or offsite treatment up to the NSRR.

2. Offsite Groundwater Replenishment Projects

   Groundwater replenishment projects include implementing a project that the permit registrant has determined to provide an opportunity to replenish regional groundwater supplies.

v. Post-Construction Site Runoff Plan Review

The ordinance or other regulatory mechanism must include procedures for the permit registrant's review and approval of structural stormwater control plans for new development and redevelopment projects.

At a minimum, the permit registrant must review and approve plans for structural stormwater control at new development and redevelopment sites that result from a land disturbance of 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); and sites that use alternative compliance to meet the retention requirement, before the start of the project. The permit registrant must review plans for consistency with the ordinance/regulatory mechanism and specifications required by Schedule A.3.e.vi. The permit registrant must not approve or recommend for approval any plans for structural controls that do not meet minimum requirements to meet Schedule A.3.e.iv and Schedule A.3.e.vi.

vi. Long-Term Operation and Maintenance (O&M)

The permit registrant must maintain an inventory and implement a strategy to ensure that all structural stormwater controls installed in compliance with this permit are operated and maintained to meet the site performance standard in Schedule A.3.e.iv. This strategy must, at minimum, include the following:

(A) Documented efforts to obtain legal authority to allow the permit registrant to inspect and require effective operation and maintenance of privately owned and operated structural stormwater controls that discharge to the MS4, to the extent allowable under state and federal law.

(B) Inspection procedures and an inspection schedule ensuring compliance with the O&M requirements of each structural stormwater control operated by the permit registrant and by other private entities.

(C) A tracking mechanism for documenting inspections and the O&M requirements for structural stormwater controls. This tracking mechanism must document enforcement actions and compliance response. For structural stormwater controls that include vegetation, the O&M requirements must at minimum include requirements to maintain and/or replace vegetation to ensure the functionality of the control. For structural stormwater controls that include soils in the treatment process, O&M requirements must at minimum include requirements to maintain soil permeability.

(D) Reporting requirements for privately owned and operated structural stormwater controls that document compliance with O&M requirements.

(E) The location of all public and private structural stormwater controls installed in compliance with this permit must be included with the MS4 Map.

vii. Training and Education

The permit registrant must ensure that staff responsible for performing post-construction runoff site plan reviews, administrating the post-construction program requirements and performing O&M practices or evaluating compliance with long-term O&M requirements are trained or otherwise qualified to conduct such activities.

The permit registrant must provide orientation and training to all new staff working to implement the post-construction runoff control program within 30 days of their assignment to this program. All staff working to implement the post-construction runoff control program must receive training at least once during the permit term. Permit registrant must provide follow-up training as procedures and/or technology utilized in this program change.

viii. Tracking and Assessment

The permit registrant must maintain records for activities conducted to meet the requirements of the Post-Construction Site Runoff program and include a descriptive summary of their activities in the corresponding Annual Report.

f. Pollution Prevention and Good Housekeeping for Municipal Operations

The permit registrant must properly operate and maintain its facilities, using prudent pollution prevention and good housekeeping to reduce the discharge of pollutants through the MS4 to waters of the state.

i. Implementation Date

(A) Existing Registrants

No later than February 28, 2022, existing registrants must implement all of the required components described in Schedule A.3.f.ii-ix. [26]

(B) New Registrants

Upon the effective date of this permit, new registrants must begin to develop and implement the required components described in Schedule A.3.f.ii-ix; all required components must be fully implemented by September 1, 2023.[27]

ii. Operation and Maintenance Strategy for Existing Structural Stormwater Controls

For existing structural stormwater controls installed or permitted by the permit registrant prior to the effective date of this permit, the permit registrant must develop and implement an operation and maintenance strategy for both permit registrant-owned controls and controls owned and operated by other non-MS4 entities discharging to the permit registrant's MS4. The O&M strategy for existing structural stormwater controls must meet the long term O&M requirements in Schedule A.3.e.vi but not the site performance standards outlined in Schedule A.3.e.iv.

iii. Inspection and Cleaning of Catch Basins

The permit registrant must inspect at least 50 percent of the permit registrant-owned or operated catch basins and inlets within the MS4 at least once every five years and take all appropriate maintenance or cleaning action based on those inspections to ensure the catch basins and inlets continue to function as designed. The permit registrant may establish a catch basin inspection prioritization system, and establish alternate inspection frequency, provided the permit registrant describes all relevant factors it uses to target its inspections to specific areas of its MS4 in the SWMP Document.

The permit registrant must maintain catch basin inspection records and cleaning records.

iv. Pollution Prevention in Facilities and Operations

The permit registrant must conduct its municipal O&M activities in a manner that reduces the discharge of pollutants through the MS4 to protect water quality. For the O&M activities it conducts, the permit registrant must develop, review, and if necessary update procedures for inspection and maintenance schedules to ensure pollution prevention and good housekeeping practices are conducted for the following activities:

(A) Pipe cleaning for stormwater and wastewater conveyance systems.
(B) Cleaning of culverts conveying stormwater in roadside ditches.
(C) Ditch maintenance.
(D) Road and bridge maintenance.
(E) Road repair and resurfacing including pavement grinding.
(F) Dust control for roads and municipal construction sites.
(G) Winter road maintenance, including salt or de-icing storage areas.
(H) Fleet maintenance and vehicle washing.
(I) Building and sidewalk maintenance including washing.
(J) Solid waste transfer and disposal areas.
(K) Municipal landscape maintenance.

[26] This deadline is extended to February 28, 2024 for: Corvallis, Springfield, and Turner.

[27] This deadline is extended to February 28, 2024 for: Albany and Millersburg.

(L) Material storage and transfer areas, including fertilizer and pesticides, Hazardous materials, used oil storage, and fuel

(M) Firefighting training activities.

(N) Maintenance of municipal facilities including public parks and open space, golf courses, airports, parking lots, swimming pools, marinas, etc.

v. Registrant-owned NPDES Industrial Stormwater Permit Facilities

Permit registrant-owned or operated facilities with industrial activity as defined in 40 CFR §122.26(b)(14) discharging stormwater to the waters of the state must have coverage under DEQ's NPDES Industrial Stormwater General Permit. The permit registrant may use the actions required in the NPDES Industrial Stormwater Permit to address the applicable facility requirements in Schedule A.3.f.iv.

vi. Requirements for Pesticide and Fertilizer Applications

The permit registrant must implement practices to reduce the discharge of pollutants to the MS4 associated with the permit registrant's application and storage of pesticides and fertilizers. At a minimum, such areas include the permit registrant's public right-of-ways, parks, recreational facilities, golf courses, and landscaped areas. All employees or contractors of the permit registrant applying pesticides must follow all label requirements, including those regarding application methods, rates, number of applications allowed, and disposal of the pesticide, fertilizer and rinsate.

vii. Litter Control

The permit registrant must implement methods to reduce litter within its jurisdiction. The permit registrant may work cooperatively with other departments, organizations, or other entities to control litter on a regular basis and after major public events, in order to reduce the discharge of pollutants and litter to the MS4.

viii. Materials Disposal

All collected material or pollutants removed in the course of maintenance, treatment, control of stormwater, or other wastewaters must be managed and disposed of in a manner to prevent such pollutants from entering the waters of the state in accordance with state and federal rules.

ix. Stormwater Infrastructure Staff Training

The permit registrant must ensure that staff responsible for evaluating O&M practices, evaluating compliance with long-term O&M requirements or ensuring pollution prevention at facilities and during operations are trained or otherwise qualified to conduct such activities.

The permit registrant must provide orientation and training to all new staff working to implement the pollution prevention and good housekeeping for municipal operations program within 30 days of their assignment to this program and at least once during the permit term. The permit registrant must provide follow-up training as procedures and/or technology utilized in this program change.

x. Tracking and Assessment

The permit registrant must maintain records for activities conducted to meet the requirements of the pollution prevention and good housekeeping for municipal operations program requirements and include a descriptive summary of their activities in the corresponding annual report.

SCHEDULE B - MONITORING AND REPORTING REQUIREMENTS

1. Compliance Evaluation

At least once per year, the permit registrant must evaluate their compliance with the requirements of this permit using the DEQ annual report template. This self-evaluation includes assessment of progress toward implementing the SWMP control measures in Schedule A, and implementation of actions to comply with any additional requirements identified pursuant to Schedule D.1 (Requirements for Discharges to Impaired Waterbodies).

2. Annual Report

No later than November 1 each year, beginning in 2020, the permit registrant must submit an annual report to DEQ. The permit registrant must use the annual report form provided by DEQ. The reporting period for the annual report is from July 1 through June 30 of the following year (for example, July 1, 2020 through June 30, 2021). Reporting periods for subsequent annual reports is specified in Table 2 below. The permit registrant must make all annual reports available to the public, including any required documents attached to the annual report, through the permit registrant's maintained website.

DEQ may extend the due date for the annual report in the event of extraordinary circumstances including, but not limited to, pandemic, wildfire, earthquake, flood, or other natural disaster provided the permit registrant requests an extension in writing and provides all documentation available regarding the specific impacts as to why the November 1 deadline cannot be met. In that circumstance, DEQ will respond to the extension request in writing and will document any revised annual report due date when applicable.

Table 2. Annual Report Deadlines[28]

Annual Report	Reporting Period	Due Date
1st Year Annual Report	Mar. 1, 2019 - June 30, 2020	Nov. 1, 2020
2nd Year Annual Report	July 1, 2020 - June 30, 2021	Nov. 1, 2021
3rd Year Annual Report	July 1, 2021 - June 30, 2022	Nov. 1, 2022
4th Year Annual Report	July 1, 2022 - June 30, 2023	Nov. 1, 2023
5th Year Annual Report	July 1, 2023 - June 30, 2024	Nov. 1, 2024

3. Monitoring Requirements

If the permit registrant discharges to a waterbody for which a TMDL has been approved or is listed on the 303(d) list, the permit registrant must comply with all monitoring requirements under Schedule D.1. In addition, if the permit registrant performs municipal stormwater monitoring at outfall locations in the receiving waterbody or to demonstrate compliance with this permit, all monitoring data must be submitted to DEQ.

a. When the permit registrant conducts stormwater monitoring, the following monitoring requirements must be followed:

   i. Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

   ii. Sample collection, preservation, and analysis must be conducted according to methods and procedures outlined in 40 CFR § 136, unless otherwise approved by DEQ. Where an

[28] Albany, Corvallis, Millersburg, Springfield, and Turner must submit the required annual report beginning on the first due date listed after permit coverage is issued.

approved 40 CFR § 136 method does not exist, and other test procedures have not been specified, any available method may be used after approval from DEQ.

b. Records of monitoring information must include:

i. The date, exact place, and time of sampling or measurements.
ii. The names(s) of the individual(s) who performed the sampling or measurements.
iii. The date(s) analyses were performed.
iv. The names of the individuals who performed the analyses.
v. The analytical techniques or methods used.

The results of such analyses must be reported in the annual report.

4. Submissions

The permit registrant must provide DEQ with one hard copy and one electronic copy (on a portable electronic storage device or via email) of the annual report and any supplemental information required by the due date in Table 2, above. For electronic submittal of documents (i.e., e-Reporting), DEQ may provide the permit registrant with instructions for submittal when required. Once the permit registrant receives permission to submit electronically, it will no longer be required to submit such materials to DEQ in hardcopy.

All hardcopy annual reports, attachments, and other required submittals must be sent to DEQ at the following addresses:

Oregon Department of Environmental Quality
MS4 Stormwater Program, Attention: 7th Floor
700 NE Multnomah St., Suite 600
Portland, OR 97232

MS4Stormwater@deq.state.or.us

5. Recordkeeping

a. Records Retention

The permit registrant must retain records and copies of all information (for example, all monitoring, calibration, and maintenance records; all original strip chart recordings for any continuous monitoring instrumentation; copies of all reports required by this permit; annual reports; a copy of the NPDES permit; and, records of all data or information used in the development and implementation of the SWMP) for a period of at least five years from the start of the permit compliance action date or for the term of this permit, whichever is longer. This period may be extended at the request of DEQ at any time.

b. Availability of Records

The permit registrant must submit records to DEQ when requested. The permit registrant must also make all records described above available to the public, if requested to do so in writing. The public must be able to view the records during normal business hours.

SCHEDULE C - COMPLIANCE CONDITIONS AND DATES

Compliance conditions and dates are not included at this time.

SCHEDULE D - SPECIAL CONDITIONS

1. Requirements for Discharges to Impaired Waterbodies

a. Applicability

The requirements of Schedule D.1 apply to MS4 discharges to receiving waters with established TMDLs and with new or modified TMDLs approved by EPA before the effective date of the permit where urban stormwater is identified as a source of TMDL pollutant loading. Schedule D.1 also applies to MS4 discharges to receiving waters identified as impaired on DEQ's current Integrated Report and 303(d) list for particular pollutants, identified before the effective date of the permit. DEQ has identified receiving waters in all urban areas covered by this permit as being water quality impaired for a variety of pollutants and most of these receiving waters are also under a TMDL load allocation. Established TMDLs in the permit registrant's coverage area are noted on the coverage page of this permit.

b. Performance Measures

DEQ incorporated performance measures in Schedule A.3.c, d, e, and f to address water quality impairments and EPA approved TMDL allocations issued to date. Compliance with the permit's terms and conditions is presumed to be in compliance with TMDL allocations issued before the effective date of this permit, unless specified below.

i. The City of Wood Village must provide a summary of the following to evaluate the control strategies established for the Lower Columbia Slough: Phosphate, Lead, and Bacteria TMDLs:

(A) For phosphate, monitor influent and effluent dissolved orthophosphate concentrations and total phosphate concentrations at a representative site in Fairview Lake (Reach 4) and Fairview Creek (Reach 5).

(B) For lead, estimate of the effectiveness of controls to remove TSS.

(C) For bacteria, measure E. coli concentrations and its distribution over flows (for example, flow duration intervals) to demonstrate compliance with E. coli criteria.

2. Definitions:

a. **Total Maximum Daily Load** (**TMDL**) or **applicable TMDL** is any TMDL, which has been approved by EPA on or before the issuance date of this permit.

b. **Best Management Practices** (**BMPs**) means schedules of activities, prohibition of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also mean treatment requirements, operating procedures, and practices to control runoff, spillage, or leaks, sludge, or waste disposal, or drainage from raw material storages. See 40 CFR § 122.2 and 122.44(k). For the purposes of this permit, BMPs are synonymous with structural and non-structural stormwater controls and include the schedule of activities, controls, prohibition of practices, maintenance procedures and other management practices designed to prevent or reduce pollution.

c. **Bioretention** means the water quality and water quantity stormwater management practice using the chemical, biological and physical properties of plants, microbes and soils for the removal of pollution from stormwater runoff.

d. **CFR** means the Code of Federal Regulations, which is the official annual compilation of all regulations and rules promulgated during the previous year by the agencies of the United States government, combined with all the previously issued regulations and rules of those agencies that are still in effect.

e. **Chronic Illicit Discharges** are continuous illicit discharges resulting from sanitary/wastewater connections to an MS4, sanitary/wastewater inflows into a MS4 and unpermitted industrial wastewater discharges to the MS4.

f. **Clean Water Act** (**CWA**) refers to what was formally called the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972, Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, and Public Law 97-117, 33 U.S.C. § 1251 et seq. [40 CFR §122.2].

g. **Common Plan of Development** means a contiguous construction project or projects where multiple separate and distinct construction activities may be taking place at different times on different schedules but under one plan.

h. **Construction Activity** includes, but is not limited to, clearing, grading, excavation, and other site preparation work related to the construction of residential buildings and non-residential buildings, and heavy construction (for example, highways, streets, bridges, tunnels, pipelines, transmission lines and industrial non-building structures).

i. **Erosion and Sediment Control Plan** is a site-specific plan designed to describe the control of soil, raw materials, or other substances to prevent pollutants in storm water runoff. For the purposes of this permit, an ESCP means a document that identifies potential sources of pollution, describes practices to reduce pollutants in stormwater discharges from the site, and identifies procedures or controls that the operator will implement to reduce impacts to water quality and comply with applicable permit requirements.

j. **Control Measure**, as used in this permit, refers to any action, activity, Best Management Practice or other method used to control the amount of pollutants in MS4 discharges.

k. **Discharge of a pollutant** means any addition of any "pollutant" or combination of pollutants to "waters of the state" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This definition includes additions of pollutants into waters of the state from surface runoff, which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person, which do not lead to a treatment works; and discharges through

pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any "indirect discharger" [40 CFR §122.2].

l. **Erosion** is the process of carrying away soil particles by the action of water, wind, or other process.

m. **Evaporate** is rainfall that is changed or converted into a vapor.

n. **Evapotranspiration** is the sum of evaporation and transpiration of water from the earth's surface to the atmosphere. It includes evaporation of liquid or solid water plus the transpiration from plants.

o. **Final Stabilization** is determined by satisfying the following criteria: (1) there is no reasonable potential for discharge of a significant amount of construction related sediment or turbidity to surface waters; (2) construction materials and waste have been removed and disposed of properly. This includes any sediment that was being retained by the temporary erosion and sediment controls; (3) all temporary erosion and sediment controls have been removed and disposed of properly, unless doing so conflicts with local requirements; (4) all soil disturbance activities have stopped and all stormwater discharges from construction activities that are authorized by this permit have ceased; (5) all disturbed or exposed areas of the site are covered by either final vegetative stabilization or permanent stabilization measures. However, temporary or permanent stabilization measures are not required for areas that are intended to be left unvegetated or unstabilized following construction (such as dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials), provided that measures are in place to eliminate or minimize erosion.

p. **Green Infrastructure** (**GI**) is a specific type of stormwater control using vegetation, soils, and natural processes to manage stormwater. At the scale of a neighborhood or site, green infrastructure refers to stormwater management systems designed to mimic nature by reducing and/or storing stormwater through infiltration, evaporation, and transpiration. At the scale of city or county, green infrastructure refers to the patchwork of natural areas that provides flood protection and natural processes that remove pollutants from stormwater.

q. **Impaired Water** means any waterbody that does not meet applicable water quality standards for one or more parameters as identified on Oregon's 303(d) list.

r. **Infiltration** is the process by which stormwater penetrates into soil.

s. **Illicit Connections** include, but are not limited to, pipes, drains, open channels, or other conveyances that have the potential to result in an illicit discharge.

t. **Illicit Discharge** is any discharge to a municipal separate storm sewer system that is not composed entirely of stormwater except discharges authorized under Section A.1.d, discharges permitted by a NPDES permit or other state or federal permit, or otherwise authorized by DEQ.

u. **Impervious Surface** is any surface resulting from development activities that prevents the infiltration of water. Common impervious surfaces include: building roofs; traditional concrete or asphalt paving on walkways, driveways, parking lots, gravel lots and roads; and heavily-compacted earthen materials.

v. **Large Community** is defined as any permit registrant not defined as a Small Community.

w. **Low Impact Development** (**LID**) is a stormwater management approach that seeks to mitigate the impacts of increased runoff and stormwater pollution using a set of planning, design and construction approaches and stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater, and can occur at a wide range of landscape scales (i.e., regional, community and site). Low impact development is a comprehensive land planning and engineering design approach to stormwater management with

a goal of mimicking the pre-development hydrologic regime of urban and developing watersheds.

x. **Maintenance Activities**, as used in the definition of Redevelopment means activities such as pavement preservation projects; restoration of impervious surfaces disturbed by construction, maintenance or repair utilities; and roof replacement projects.

y. **Maximum Extent Practicable (MEP)** is the technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by Section 402(p)(3)(B)(iii) of the Clean Water Act [33 U.S.C §1342(p)(3)(B)(iii)].

z. **Minimize** means to reduce and/or eliminate to the extent achievable using control measures (including BMPs) that are technologically available, economically practicable, and achievable in light of best industry or municipal practices.

aa. **Municipal Separate Storm Sewer System** (**MS4**) is defined in 40 CFR §122.26(b) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the Clean Water Act that discharges to waters of the state; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works as defined at 40 CFR §122.2.

bb. **Municipality** means a city, town, borough, county, parish, district, association, or other public body created by or under state law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the Clean Water Act.

cc. **National Pollutant Discharge Elimination System** (**NPDES**) is the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of Clean Water Act [40 CFR §122.2].

dd. **Non-structural Stormwater Controls** or **BMPs** are stormwater controls in the form of development standards or other regulatory mechanisms intended to minimize and treat stormwater by minimizing impervious surfaces and by using soil infiltration, evaporation, and transpiration. These controls may also take the form of procedural practices to prevent pollutants from contaminating stormwater. The use of this term in this permit is consistent with the discussion of non-structural stormwater BMPs in 64 Federal Register 68760 (December 9, 1999) which encompasses preventative actions that involve management and source controls such as: (1) policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive waterbodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; (2) policies or ordinances that encourage infill development in higher density urban areas, and areas with existing storm sewer infrastructure; (3) education programs for developers and the public about project designs that minimize water quality impacts; and (4) other measures such as minimization of the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, and source control measures often thought of as good housekeeping, preventive maintenance and spill prevention.

ee. **Outfall** is defined as a point source at the point where a municipal separate storm sewer discharges to waters of the tate, and does not include open conveyances connecting two

municipal separate storm sewers or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the state and are used to convey waters of the State.

ff. **Owner** or **Operator** is the owner or operator of any "facility or activity" subject to regulation under the NPDES program.

gg. **Pesticide** as used in this permit carries the same definition as used in the Federal Insecticide, Fungicide, and Rodenticide Act and is any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Under FIFRA, a pest is any insect, rodent, nematode, fungus, weed, or any other form of terrestrial or aquatic plant or animal life or virus, bacteria, or other micro-organism

hh. **Plant Intercept** is the capture of precipitation by the plant canopy and its subsequent return to the atmosphere through evaporation or sublimation.

ii. **Pollutant** is dredged soil; solid waste; incinerator residue; sewage; garbage; sewerage sludge; munitions; chemical wastes; biological materials; radioactive materials; heat; wrecked or discarded equipment; rock; sand; cellar dirt; and industrial, municipal, and agricultural waste discharged into water.

jj. **Predevelopment Hydrologic Function** is the hydrology of a site reflecting the local rainfall patterns, soil characteristics, land cover, evapotranspiration, and topography. The term predevelopment as used in predevelopment hydrologic function is consistent with the term predevelopment as discussed in Federal Register Volume 64, Number 235 and refers to the runoff conditions that exist onsite immediately before the planned development activities occur. Predevelopment is not intended to be interpreted as the period before any human-induced land disturbance activity has occurred.

kk. **Post-Construction Site Runoff Plan** is a plan developed by a site owner or operator and/or their designer to demonstrate compliance with the post-construction stormwater management and long-term operation and maintenance requirements of this permit.

ll. **Redevelopment** means a project that entails Construction Activities, occurs on a previously developed site and results in the addition or replacement of impervious surface. To the extent allowable under federal law, Redevelopment does not include: Maintenance Activities; Construction Activities conducted to ameliorate a public health or safety emergency or natural disaster; and/or Construction Activities within an existing footprint to repair or replace a site or a structure damaged by a public health or safety emergency or natural disaster.

mm. **Regulated small MS4** is a municipal separate storm sewer that is not a medium or large MS4. A large MS4 is defined in 40 CFR §122.26(b)(4). A medium MS4 is defined in 40 CFR § 122.26(b)(7). For the purposes of this permit, a small MS4 is any municipal separate storm sewer system located within a Census-defined Urbanized Area. Regulated small MS4s are automatically designated as needing an NPDES permit pursuant to federal requirements found in 40 CFR § 122.30-37. A regulated small MS4 also means any MS4 designated by DEQ pursuant to 40 CFR §122.26((a)(1)(v) and/or 123.35 as needing a NPDES permit.

nn. **Small Community** is defined as any permit registrant that has a population of less than 10,000 people or is a county that is the sole permit registrant/applicant. If the county is a co-registrant at the time of permit coverage or becomes a co-registrant at any time of permit coverage under this permit, it is not eligible for this exemption.

oo. **Small MS4**, is defined at 40 CFR § 122.26(b)(16) and (17), respectively, and means all separate storm sewers that are: (i) owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization,

or a designated and approved management agency under section 208 of the Clean Water Act that discharges to waters of the state; (ii) not defined as "large" or "medium" municipal separate storm sewer systems pursuant to 40 CFR § 122.26(b)(4) and (b)(7), or designated under 40 CFR § 122.26(a)(1)(v); and (iii) includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

pp. **Stormwater** or **stormwater runoff** includes snow melt runoff, and surface runoff and drainage, and is defined in 40 CFR §122.26(b)(13). "Stormwater" means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, channels, or pipes into a defined surface water channel or a constructed infiltration facility.

qq. **Stormwater Control** refers to non-structural, structural stormwater controls and/or BMPs.

rr. **Stormwater Management Program** (**SWMP**) refers to a comprehensive program to manage the quality of stormwater discharged from the municipal separate storm sewer system. For the purposes of this permit, the SWMP consists of the actions and activities conducted by the permit registrant as required by the permit and described in the permit registrant's SWMP Document.

ss. A **SWMP Document** is the written summary describing the unique and/or cooperative means by which an individual permit registrant or entity implements the specific stormwater management control measures required by the permit.

tt. **Stormwater Mitigation Bank Program** is a program for offsite compliance that establishes a market with an entity that tracks the life cycle of an offsite mitigation credit by certifying the credit, issuing a tradable credit to the seller, transferring the ownership of the credit from the seller to the buyer, and use or retirement of the credit to receive a benefit when the buyer of the credit is unable to meet a retention requirement on their site.

uu. **Stormwater Payment-in-Lieu Program** is a program for offsite compliance where the permit registrant or site owner/operator pays a fee in lieu of full compliance on the development site with this fee based on volume ratios (i.e., volume of stormwater to be retained onsite to the volume to be retained at the mitigation site) and a rate specified by the registrant. The registrant can aggregate fees and apply them to a public stormwater structural or non-structural control at a later point in time.

vv. **Structural Stormwater Controls** or **BMPs** are stormwater controls that are physically designed, installed, and maintained to prevent or reduce the discharge of pollutants in stormwater to minimize the impacts of stormwater on waterbodies. As noted in the 64 Federal Register 68760 (December 9, 1999), examples of structural stormwater controls or BMPs include: (1) storage practices such as wet ponds and extended-detention outlet structures; (2) filtration practices such as grassed swales, sand filters and filter strips; and, (3) infiltration practices such as infiltration basins and infiltration trenches.

ww. **Subwatershed** is a subdivision of a watershed and is the sixth-level 12-digit unit of the hydrologic unit hierarchy as defined by the National Watershed Boundary Dataset (USGS et al 2013).

xx. **Transpiration** means to release water vapor into the atmosphere through plant stomata or pores.

yy. **Waters of the State** means lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon, and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not

combine or effect a junction with natural surface or underground waters) that are located wholly or partially within or bordering the State, or within its jurisdiction.

SCHEDULE F - NPDES PERMIT GENERAL (MS4)

The general conditions in this schedule apply only to the extent they do not conflict with the requirements contained in Schedules A through E. If the permit requirements in Schedule A through D conflict with these general conditions, the permit requirements in Schedule A through D will control.

SECTION A. STANDARD CONDITIONS

A1. Duty to Comply with Permit

The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and the federal Clean Water Act and is grounds for an enforcement action. Failure to comply is also grounds for DEQ to terminate, modify and reissue, revoke, or deny renewal of a permit.

A2. Penalties for Water Pollution and Permit Condition Violations

The permit is enforceable by DEQ or EPA, and in some circumstances also by third-parties under the citizen suit provisions of 33 USC § 1365. DEQ enforcement is generally based on provisions of state statutes and Environmental Quality Commission (EQC) rules, and EPA enforcement is generally based on provisions of federal statutes and EPA regulations.

ORS 468.140 allows DEQ to impose civil penalties up to $25,000 per day for violation of a term, condition, or requirement of a permit. The federal Clean Water Act provides for civil penalties not to exceed $25,000 per day for each violation of any condition or limitation of this permit.

Under ORS 468.943, unlawful water pollution in the second degree, is a Class A misdemeanor and is punishable by a fine of up to $25,000, imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense. The federal Clean Water Act provides for criminal penalties of not more than $50,000 per day of violation, or imprisonment of not more than 2 years, or both for second or subsequent negligent violations of this permit.

Under ORS 468.946, unlawful water pollution in the first degree is a Class B felony and is punishable by a fine up to $250,000, imprisonment for not more than 10 years or both. The federal Clean Water Act provides for criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment of not more than 3 years, or both for knowing violations of the permit. In the case of a second or subsequent conviction for knowing violation, a person is subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

A3. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit. In addition, upon request of DEQ, the permittee must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

A4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

DEQ may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

A5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

a. Violation of any term, condition, or requirement of this permit, a rule, or a statute.
b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts.
c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
d. The permittee is identified as a Designated Management Agency or allocated a wasteload under a total maximum daily load (TMDL).
e. New information or regulations.
f. Modification of compliance schedules.
g. Requirements of permit reopener conditions.
h. Correction of technical mistakes made in determining permit conditions.
i. Determination that the permitted activity endangers human health or the environment.
j. Other causes as specified in 40 CFR § 122.62, 122.64, and 124.5.

The filing of a request by the permittee for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

A6. Toxic Pollutants

The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rules (OAR) 340-041-0033 and 307(a) of the federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

A7. Property Rights and Other Legal Requirements

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other private rights, or any infringement of federal, tribal, state, or local laws or regulations.

A8. Permit References

Except for effluent standards or prohibitions established under section 307(a) of the federal Clean Water Act and OAR 340-041-0033 for toxic pollutants, and standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

A9. Permit Fees

The permittee must pay the fees required by OAR.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

B1. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

B2. Need to Halt or Reduce Activity Not a Defense

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B3. Bypass of Treatment Facilities

a. Definitions
   (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b and c of this section.
   (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Prohibition of bypass.
   (1) Bypass is prohibited and DEQ may take enforcement action against a permittee for bypass unless:
      i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and
      iii. The permittee submitted notices and requests as required under General Condition B3.c.
   (2) DEQ may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when DEQ determines that it will meet the three conditions listed above in General Condition B3.b(1).

c. Notice and request for bypass.
   (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, a written notice must be submitted to DEQ at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required in General Condition D5.

B4. Upset

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
   (1) An upset occurred and that the permittee can identify the causes(s) of the upset;
   (2) The permitted facility was at the time being properly operated;
   (3) The permittee submitted notice of the upset as required in General Condition D5, hereof (24-hour notice); and
   (4) The permittee complied with any remedial measures required under General Condition A3 hereof.

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

B5. Treatment of Single Operational Upset

For purposes of this permit, a single operational upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one federal Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include federal Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.

B6. Public Notification of Effluent Violation

If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entities (for example, public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed under General Condition B7. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

B7. Emergency Response and Public Notification Plan

The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from bypasses or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

a. Ensure that the permittee is aware (to the greatest extent possible) of such events;
b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;
c. Ensure immediate notification to the public, health agencies, and other affected entities (including public water systems). The response plan must identify the public health and other officials that will receive immediate notification;
d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;
e. Provide emergency operations; and
f. Ensure that DEQ is notified of the public notification steps taken.

B8. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

C1. Representative Sampling

Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and must be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points must not be changed without notification to and the approval of DEQ. Samples must be collected in accordance with requirements in 40 CFR part 122.21 and 40 CFR part 403 Appendix E.

C2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

C3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR part 136 or, in the case of sludge (biosolids) use and disposal, approved under 40 CFR part 503 unless other test procedures have been specified in this permit.

For monitoring of recycled water with no discharge to waters of the state, monitoring must be conducted according to test procedures approved under 40 CFR part 136 or as specified in the most recent edition of Standard Methods for the Examination of Water and Wastewater unless other test procedures have been specified in this permit or approved in writing by DEQ.

C4. Penalties for Tampering

The federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit may, upon conviction, be punished by a fine of not more than $10,000 per violation, imprisonment for not

more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both.

C5. Reporting of Monitoring Results

Monitoring results must be summarized each month on a discharge monitoring report form approved by DEQ. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

C6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR part 136 or, in the case of sludge (biosolids) use and disposal, approved under 40 CFR part 503 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (for example, total residual chlorine), only the average daily value must be recorded unless otherwise specified in this permit.

C7. Averaging of Measurements

Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which must be averaged as specified in this permit.

C8. Retention of Records

Records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities must be retained for a period of at least 5 years (or longer as required by 40 CFR part 503). Records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit must be retained for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of DEQ at any time.

C9. Records Contents

Records of monitoring information must include:

a. The date, exact place, time, and methods of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

C10. Inspection and Entry

The permittee must allow DEQ or EPA upon the presentation of credentials to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

C11. Confidentiality of Information

Any information relating to this permit that is submitted to or obtained by DEQ is available to the public unless classified as confidential by the Director of DEQ under ORS 468.095. The permittee may request that information be classified as confidential if it is a trade secret as defined by that statute. The name and address of the permittee, permit applications, permits, effluent data, and information required by NPDES application forms under 40 CFR § 122.21 are not classified as confidential [40 CFR § 122.7(b)].

SECTION D. REPORTING REQUIREMENTS

D1. Planned Changes

The permittee must comply with OAR 340-052, "Review of Plans and Specifications" and 40 CFR § 122.41(l)(1). Except where exempted under OAR 340-052, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by DEQ. The permittee must give notice to DEQ as soon as possible of any planned physical alternations or additions to the permitted facility.

D2. Anticipated Noncompliance

The permittee must give advance notice to DEQ of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

D3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and EQC rules. No permit may be transferred to a third party without prior written approval from DEQ. DEQ may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under 40 CFR § 122.61. The permittee must notify DEQ when a transfer of property interest takes place.

D4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

D5. Twenty-Four Hour Reporting

The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) within 24 hours from the time the permittee becomes aware of the circumstances, unless a shorter time is specified in the permit. During normal business hours, the DEQ regional office must be called. Outside of normal business hours, DEQ must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

The following must be included as information that must be reported within 24 hours under this paragraph:

a. Any unanticipated bypass that exceeds any effluent limitation in this permit;
b. Any upset that exceeds any effluent limitation in this permit;
c. Violation of maximum daily discharge limitation for any of the pollutants listed by DEQ in this permit; and
d. Any noncompliance that may endanger human health or the environment.

A written submission must also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:

e. A description of noncompliance and its cause;
f. The period of noncompliance, including exact dates and times;
g. The estimated time noncompliance is expected to continue if it has not been corrected;
h. Steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and
i. Public notification steps taken, pursuant to General Condition B7.

DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

D6. Other Noncompliance

The permittee must report all instances of noncompliance not reported under General Condition D4 or D5, at the time monitoring reports are submitted. The reports must contain:

a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected; and
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

D7. Duty to Provide Information

The permittee must furnish to DEQ within a reasonable time any information that DEQ may request to determine compliance with the permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee must also furnish to DEQ, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to DEQ, it must promptly submit such facts or information.

D8. Signatory Requirements

All applications, reports or information submitted to DEQ must be signed and certified in accordance with 40 CFR § 122.22.

D9. Falsification of Information

Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed $125,000 per violation and up to 5 years in prison per ORS chapter

161. Additionally, according to 40 CFR § 122.41(k)(2), any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance will, upon conviction, be punished by a federal civil penalty not to exceed $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

D10. Changes to Discharges of Toxic Pollutant

The permittee must notify DEQ as soon as it knows or has reason to believe the following:

a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:
   (1) One hundred micrograms per liter (100 µg/l);
   (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
   (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
   (4) The level established by DEQ in accordance with 40 CFR § 122.44(f).

b. That any activity has occurred or will occur that would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
   (1) Five hundred micrograms per liter (500 µg/l);
   (2) One milligram per liter (1 mg/l) for antimony;
   (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
   (4) The level established by DEQ in accordance with 40 CFR § 122.44(f).

SECTION E. DEFINITIONS

E1. *BOD or BOD_5* means five-day biochemical oxygen demand.
E2. *CBOD or $CBOD_5$* means five-day carbonaceous biochemical oxygen demand.
E3. *TSS* means total suspended solids.
E4. *Bacteria* means but is not limited to fecal coliform bacteria, total coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and *Enterococcus* bacteria.
E5. *FC* means fecal coliform bacteria.
E6. *Total residual chlorine* means combined chlorine forms plus free residual chlorine
E7. *Technology based permit effluent limitations* means technology-based treatment requirements as defined in 40 CFR § 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
E8. *mg/l* means milligrams per liter.
E9. *µg/l* means microgram per liter.
E10. *kg* means kilograms.
E11. *m^3/d* means cubic meters per day.
E12. *MGD* means million gallons per day.
E13. *Average monthly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

E14. *Average weekly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

E15. *Daily discharge* as defined at 40 CFR § 122.2 means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge must be calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge must be calculated as the average measurement of the pollutant over the day.

E16. *24-hour composite sample* means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.

E17. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.

E18. *Quarter* means January through March, April through June, July through September, or October through December.

E19. *Month* means calendar month.

E20. *Week* means a calendar week of Sunday through Saturday.

Appendix D – Stormwater Management Plan

MARION COUNTY
STORMWATER MANAGEMENT PLAN
2019-2024

Marion County Public Works
Environmental Services Division
5155 Silverton Rd NE
Salem, OR 97305

(503) 588-5036

Table of Contents

Background

Since 2007, Marion County has implemented the National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System Permit (NPDES MS4). Currently under the Phase II General Permit and having changed at one point from an individual permit to a general permit, many of the program's Best Management Practices (BMPs) since inception have also undergone changes to fit within current permit requirements.

Marion County's Stormwater Management Area (SWMA) corresponds with the U.S. Census Bureau and is designated as an "Urbanized Area". These areas are developed based on census data relating to population densities and census blocks. Within this "Urbanized Area", Marion County has a specified Stormwater Management Area around the cities of Salem, Keizer, and Turner, and a small area in Butteville, but primarily located within the East Salem Service District (ESSD). Though it is designated as an urbanized area, the land use is inclusive of agricultural, commercial, multi-family residential, single-family residential, and rural-residential areas as well. The SWMA is comprised of 8,589 total acres containing a total of 11,412 property locations:

SWMA Area	Acres	Properties
Inside ESSD	3,407	9,344
Outside ESSD	5,182	2,068
Total:	8,589	11,412

The following watersheds can be found, whole or just partially, within the Marion County SWMA:

- Claggett Creek
- Little Pudding River
- Mill Creek (including Battle Creek)
- Croisan Creek

Revisions

The SWMP document must be reviewed and, if necessary, updated annually. Once reviewed, please sign and date when the necessary revisions are approved:

Due Date	Signature	Date
November 2021	Alex Wade	October 2021
November 2022	Roxanne Toepfer	October 2022
November 2023		
November 2024		

Control Measure: Public Education & Outreach

Goal

The goal of the education and outreach program is to reduce the behaviors and practices of target audiences that cause or contribute to adverse stormwater impacts on receiving waters. The program should promote specific actions to increase understanding of how to reduce pollutant discharges in stormwater runoff and prevent illicit discharge from entering the MS4 and impacting receiving waters.

Permittee Intentions

- Inform the general public, homeowners, school children, construction site operators, elected officials, and other stakeholders about the impacts of stormwater pollution on our waterways.
- Provide these audiences with steps and/or actions that will reduce pollutants in stormwater runoff.
- Understand which local behaviors and practices cause and contribute to stormwater pollution and work to reduce those selected behaviors.

The program will utilize education and outreach methods that are appropriate for the desired audiences. Some of these methods may include social media messaging, brochures, flyers, handouts, in-person events, presentations, and/or trainings.

Responsible Person(s)

Most outreach activities are designed and implemented by an Environmental Specialist who is supervised by the Environmental Services Program Supervisor. Some outreach activities may involve other groups within Public Works or other entities but will be coordinated through an Environmental Specialist. All Environmental Services activities are approved and overseen by the Environmental Services Division Manager and the Public Works Director.

Measurable Goals

Milestones	Imp.	Deliverables
1. Education and Outreach Program:		
Stay abreast of new priority topics	Feb. 2020	Coordinate topics with target audience
2. Educational Activities, Target Audiences, Topics, & Construction Site Control Measures:		
Offer 2 messages annually (messaging should be offered in Spanish)	Feb. 2020	Priority topic covered, method, audience type, estimated reach
3. Tracking and Assessment:		
Determine type of assessment and activity to assess; implement assessment; implement findings in following year	Nov. 2020	Assessment metric, summary of how the activity was considered successful

BMPs

1. Education and Outreach Program: Stay abreast of priority topics that impact water quality, universally and locally. The following will be classified as priority topics to be addressed during outreach campaigns over the course of the permit term:
    a. Impacts from impervious surfaces and to avoid them
    b. Practices for proper use and storage of pesticides, herbicides, and fertilizers
    c. Practices to reduce litter
    d. Practices for recycling programs
    e. Practices for power washing, carpet, cleaning, auto repair and maintenance
    f. Low impact development and green infrastructure
    g. Potential impacts of septic systems and practices for maintenance
    h. Watershed awareness
    i. Storm drain awareness and connectivity to local rivers and streams
    j. Other stormwater issues of significance
    k. Mercury in sediments and impacts
    l. Impacts of illicit discharges on receiving waters and how to report them

    Rationale: The County has an established web presence and utilizes social media to share several water quality-related educational messages annually. Marion County Public Works has recently hired a Communications Coordinator who oversees and implements strategic social media campaigns aimed at educating the public on environmental messaging including pollutants and hazards to the environment, best practices for sustainable living, and what resources are available to them. In addition, Environmental Specialist staff are routinely working in coordination with the Communications Coordinator to specifically meet the targeted needs of the NPDES Permit. To promote behavioral change, staff will consider behaviors that negatively impact water quality locally. Staff will concentrate on creating in-depth messaging and activities that target those behaviors throughout the permit term. Focusing in-depth on a small number of topics will promote a lasting behavioral change.

2. Educational Activities, Target Audiences, Topics, & Construction Site Control Measures: Offer at least two educational messages or activities a year that address the County's priority topics created from the above list (messaging should be offered in Spanish):
    a. Offer at least one educational message or activity from the priority list to the general public, homeowners, students, or businesses over the permit term.
    b. Offer at least one educational message or activity from the priority list to local elected officials, land use planners or engineers over the permit term.

c. Offer at least two educational messages or activities to construction site operators over the permit term that addresses any of the following topics:
    i. Appropriate selection, design, installation and use of onsite stormwater controls as outlined by Marion County ordinances
    ii. Appropriate maintenance of onsite stormwater controls as outlined by Marion County ordinances

Rationale: By distributing at least two educational messages or activities a year, the County will be fulfilling the general permit requirements. Additionally, by focusing messages on the County identified priority topics, the messaging will be more impactful.

The County currently focuses heavily on distributing most of their educational messages to the public using social media. During this permit term, staff should identify priority topics to promote through social media. Staff should also coordinate social media messaging with other activities to have a greater impact. Finally, staff should continue to provide messaging in Spanish.

Historically, the County has reached land use planners through the Point of Contact program by handing out brochures and informational pamphlets. During this permit term, staff should work with the Land Development Planning and Engineering group and the Marion Water Quality Advisory Committee (MWQAC) to identify priority topics to focus on annually and the best methods for distributing those messages. As updates are made to the engineering standards and thresholds tightened for construction erosion, these topics should be specifically targeted to construction operators.

Typically, methods for reaching elected officials have been through updates to the Board of Commissioners as issues or changes arise. This approach meets the permit requirements. However, staff should consider identifying other possible ways of sharing educational messages with County public officials in a less formal way, to keep them abreast of concerns and successes.

The County has been successful in reaching Construction Site Operators through the annual Erosion Control Summit, coordinated in partnership with the Mid-Willamette Outreach Group. Continued participation in the development of the summit should be pursued, but if other opportunities to reach this audience arise, they should be considered as well.

3. Tracking and Assessment**:** Assess or evaluate one education and outreach activity to determine effectiveness of the activity in conveying materials to the intended audience.

Rationale: While the County has conducted informal evaluations of outreach programs, these evaluations do not typically inform future outreach activities. At least one program, message, or activity shall be evaluated each year for effectiveness.

Control Measure: Public Involvement & Participation

Goal

Implement a public involvement and participation program that provides opportunities for the public to effectively participate in the development of the SWMP control measures.

Permittee Intentions

- Provide adequate opportunity for the public to participate in the development of the SWMP control measures and programs.
- The program will utilize a variety of methods to make the public aware of opportunities to participate in the development of implementation plans. It will also encourage participation from diverse groups within the community.

Responsible Person(s)

Many of the outreach activities are designed and implemented by an Environmental Specialist who is supervised by the Environmental Services Program Supervisor. All Environmental Services activities are approved and overseen by the Environmental Services Division Manager and the Public Works Director.

Measurable Goals

Milestones	Imp.	Deliverables
1. Publicly Accessible Website:		
Conduct an annual revision and update	Feb. 2020	Date of revision and update
2. Stewardship Opportunity:		
Develop stewardship opportunity; implement activity	Feb. 2024	Summary of opportunities, relevant dates, and number of participants
Utilize the Marion Water Quality Advisory Committee (MWQAC) to develop the SWMP and SWMP programs: Host quarterly MWQAC meetings; provide opportunities for input	Feb. 2024	Meeting dates, agendas, number of attendees, and minutes
3. Tracking and Assessment:		
Determine type of assessment and activity to assess; implement assessment; implement findings in following year	-	Assessment metric, summary of how the activity was considered successful

BMPs

1. Publicly Accessible Website: Maintain and promote a publicly accessible website that includes the following information:
    a. Illicit discharge reporting mechanism
    b. Draft documents, final reports, plans and current SWMP document
    c. Links to ordinances, policies related to stormwater control programs, and various educational materials
    d. Contact information for current staff

    Rationale: The County maintains and operates a publicly accessible website that meets current permit standards. Updates will be made as the relevance of contents shifts. Staff will periodically review the site and make updates that will add educational value as well as make the site easier to navigate. Additionally, the most recent versions of the SWMP, illicit discharge reporting protocol, and County Ordinances will be added as they are updated.

2. Stewardship Opportunity: Create stewardship opportunities for the public. These could include:
    a. Stream team activities
    b. Storm drain marking
    c. Volunteer monitoring
    d. Riparian plantings or stormwater facility enhancement
    e. Neighborhood low-impact development
    f. Adopt-a-Road
    g. Citizen advisory committee
    h. Other locally relevant opportunities

    Rationale: The County has typically relied on the Adopt-a-Road program to fulfill the permit stewardship requirements; however, success has also been made in hosting volunteer opportunities for litter clean up events and storm drain marking. To see continued success and attendance at stewardship events, it will be important to continue to cultivate engagement of volunteers. Staff will work with the Marion County Volunteer Services Coordinator to develop a list of potential volunteers and will continue to implement at least one of those stewardship opportunities yearly.

    Marion County will utilize the Marion Water Quality Advisory Committee (MWQAC) to develop the SWMP and SWMP programs:

Rationale: During previous permit cycles, County staff met with the MWQAC to develop and review proposed ordinance changes and found great value in their feedback. Staff should continue to utilize this public group by meeting with them quarterly. These meetings should provide updates and assess programmatic needs. Staff will rely heavily on the MWQAC for their input on the SWMP, ordinance updates and other protocol that are being updated as a result of the general permit.

3. Tracking and Assessment: Assess or evaluate one Public Involvement & Participation activity to determine effectiveness of the activity in engaging the to the intended audience.

   Rationale: While the County has conducted informal evaluations of participatory programs, these evaluations do not typically inform future activities. At least one program or activity shall be evaluated each year for effectiveness.

Control Measure: Illicit Discharge Detection & Elimination

Goal

Implement and enforce a program to detect and eliminate illicit discharges into the MS4.

Permittee Intentions

- Implement and enforce a program that detects and eliminates illicit discharges into the MS4.
- The program will prohibit non-stormwater discharges into the MS4 through the enforcement of a county ordinance or other regulatory method.

Responsible Person(s)

The illicit discharge program has traditionally been run as a coordinated effort between the Public Works Dispatch staff, the stormwater operations crew, and Environmental Specialists. Dispatch collects and documents complaints. Stormwater operations crews will investigate where appropriate. Environmental Specialists will investigate and respond.

Measurable Goals

Milestones	Imp.	Deliverables
1. MS4 Map:		
Create an outfall map and inventory	Aug. 2021	Outfall inventory created; refining information through ground-truthing; GIS; Stormwater operations crews update with identifiers as new items are installed

Continually update MS4 map, conveyance system, and stormwater assets	Aug. 2023	Updated maps; GIS; Stormwater operations crews update with identifiers as new items are installed
Create unique IDs for stormwater assets and structural stormwater control locations in GIS; conduct GIS analysis to determine missing information	Aug. 2022	Unique IDs created; percent of MS4 mapped; GIS; Stormwater operations crews update with identifiers as new items are installed
Map chronic illicit discharges	-	No known chronic discharges as of date; mechanism to capture through Survey123
2. Ordinance and/or Other Regulatory Mechanisms:		
Implement Ordinance	Jul. 2022	Internal Enforcement Procedure; Completed by way of MC Code Chapter 15.15 (Ordinance 1311)
3. Enforcement Procedures:		
Evaluate and update IDDE enforcement procedures (as needed)	Jul. 2020	IDDE Enforcement Procedure (Updated 02/24/2022)
4. Program to Detect and Eliminate Illicit Discharges:		
Review and update IDDE documentation procedures and reporting system	Jan. 2022	Through the public-facing website, complaints are routed (Report-a-Concern) to internal distribution group where complaint is forwarded to Dispatch Center and Environmental Specialist for appropriate tracking, response, and investigation; average response time within 24-hours. Maintain contact information for neighboring jurisdictions.
5. Dry Weather Screening Program:		
Develop a dry weather screening schedule to capture 60 percent of their MS4 outfalls each year.	Feb. 2022	Schedule completed; historically, 100% of outfalls are screened each permit year.
Develop priority locations for annual dry-weather field screening of outfalls to detect illicit discharges.	Feb. 2022	Annual survey: goal of 100% of outfalls screened. Historically, this is accomplished with ease.
Develop pollutant parameter action levels for response	Feb. 2022	Pollutant parameter document developed and employed.
Laboratory analysis	Feb. 2022	Site visit; sample and analysis.
6. Illicit Discharge Detection and Elimination Training and Education:		
Develop IDDE training	Feb. 2022	Training is currently done in person; one-on-one.

7. Tracking and Assessment:		
Determine type of assessment and activity to assess; implement assessment; implement findings in following year	Feb. 2022	Assessment metric: summary of how the implementation of the program was considered successful.

BMPs

1. MS4 Map**:** Update and maintain a current map and digital inventory of the MS4 including the following:
    a. Outfalls
    b. Conveyance system
    c. Stormwater control locations
    d. Chronic illicit discharges
    e. Dry weather flows

    In addition to the map, there must also be an outfall inventory with all the known outfall locations. The inventory must include a unique identifier (i.e., alphanumeric code), any geographic information necessary to find the outfall in the field and the name(s) of the receiving water(s).

    Rationale: The County maintains a GIS database that includes features such as the storm drains, pipes, culverts, and outfalls. Staff will continue to work to update the mapping of new or discovered assets, create unique IDs for all features, and continue to map illicit discharge and dry weather monitoring sites.

2. Ordinance and/or Other Regulatory Mechanisms**:** Implement the existing Stormwater Discharge Quality Control Ordinance (#1311) to reflect the conditions of the general permit.

    Rationale: In 2003 the County implemented East Salem Service District (ESSD) Ditch Maintenance Ordinance (#1174) which prohibits the dumping of solid waste, discarded items, or yard debris into ESSD ditches. This ordinance serves a large portion of the SWMA and can be used for IDDE purposes. It should be reviewed and updated in conjunction with general permit updates or revisions.

    In 2011, the County implemented the Stormwater Discharge Quality Control Ordinance (#1311) to meet the illicit discharge terms of the permit. An escalating enforcement procedure has been developed and employed.

    The requirements of Ordinances 1174 and 1311 are part of Marion County Code Chapter 15.15, “Stormwater Discharge Quality Control” which requires prohibitions within the

SWMA. The Water Quality Management Plan for the updated Willamette Basin Mercury TMDL does have extra provisions which should be met through expansion of this code, or a similar code to all county owned assets and property. This is currently be evaluated for the appropriate approach.

3. Enforcement Procedures**:** Develop and implement an IDDE Enforcement Plan that includes the following:
    a. Timelines for compliance
    b. Progressively stricter responses for repeat violations

    Rationale: The County currently has a written escalating enforcement and response procedure that fulfills the requirements of the permit. This document will be used as guidance in enforcing a progressive response. Marion County Public Works Environmental Services staff will work in conjunction with the Marion County Code Enforcement Division to address repeated violations to achieve compliance.

4. Program to Detect and Eliminate Illicit Discharges**:** Develop and implement an IDDE response plan that includes the following:
    a. An internal and external IDDE reporting system
    b. Timelines for response and investigation
    c. Documentation and tracking procedures

    Rationale: Illicit Discharge Detection and Elimination complaints are received by phone, walk-in, or routed through the County website (Report-a-Concern) to an internal distribution group where complaint is forwarded to the Marion County Public Works Dispatch Center, operations crews, and Environmental Specialists for response and investigation. For consistency and proper documentation, a reporting and investigation mechanism through GIS is being developed. The County has a standard for responding to emergency situations where there is a threat to human health, welfare, or the environment; response time will be immediate, during and after office hours. Marion County typically has a current response rate within 1-day for all other complaints. An Environmental Specialist will ensure that contact will be made to notify neighboring jurisdictions when the authority has been misplaced.

5. Dry Weather Screening Program**:** Develop and implement a dry weather screening schedule.

Rationale: On an annual basis, during the dry season, stormwater operations crews will complete the established route to conduct dry weather screening for all outfalls which alleviates the need to establish a priority list. Documentation is gathered through the existing GIS system which documents timestamp and condition of each outfall. As the program develops and with each screening season, improvements will be made to enhance the collected data. The County has developed a pollutant parameter action level document if a response is necessary.

6. Illicit Discharge Detection and Elimination Training and Education**:** Implement an IDDE training program for all potential response staff.

   Rationale: Illicit Discharge Detection and Elimination training has been an ongoing practice for all County operations crews. Trainings will undergo revisions and updates to reflect new expectations and evolving technologies. Stormwater operations crews within the SWMA specifically undergo an annual refresher training.

7. Tracking and Assessment: Evaluate to determine the effectiveness the implementation of the IDDE program.

   Rationale: As an ongoing assessment, data throughout the permit year will be collected and monitored. Reports will be produced from the data collected where they can be further analyzed to ensure that the program is meeting permit requirements. This allows for the response to IDDE to be evaluated and improved upon and to be implemented in an efficient and resolute way.

Control Measure: Construction Site Runoff Control

Goal

Implement and enforce a construction site runoff control program to reduce discharges of pollutants from construction sites in the coverage area.

Permittee Intentions

- Implement and enforce a program that reduces the discharge of pollutants from construction sites to the MS4.
- By an ordinance or other regulatory mechanism, the program will require erosion and sediment controls and waste materials management controls to be used at all qualifying construction sites.

Responsible Person(s)

The work involved in this control measure will be a collaborative effort between the County's LDEP Engineering staff and Environmental Specialists. LDEP is responsible for reviewing, permitting, and inspecting construction sites. To update ordinances and standards, they will need input from both Engineering and Environmental Specialist staff. LDEP staff will review and provide updates for ESCP templates, inspection checklists, and enforcement procedures. Engineering staff will review and provide updates to engineering standards and the Environmental Specialists will coordinate meetings, draft new language for ordinances, and review final documents to ensure compliance with the general permit.

Measurable Goals

Milestones	Imp.	Deliverables
1. Ordinance and/or Other Regulatory Mechanism:		
Provide draft to BOC for review; public comment period; update Ordinance #1307	Aug. 2022	Updated ordinance
2. Compliance with Other NPDES Permits:		
For construction projects that disturb one or more acres	Feb. 2023	Refer to DEQ or appropriate DEQ agent to obtain NPDES Construction Stormwater Permit coverage.
3. Erosion and Sediment Control Plans (ESCP):		
ESCP template established; develop updated internal procedures for ESCP documentation	Jan. 2021	Updated procedure
Requirement for construction site operators to complete a site-specific ESCP prior to construction/land disturbance	Feb. 2023	Document will be used to verify that items on checklist are complete prior to approval from County.
Requirement for ESCP to be maintained and updated as needed; develop updated inspection procedures.	Feb. 2023	Inspectors to be trained to ensure proper maintenance of ESCP; updated procedures and ordinance
Maintain ESCPs on site during construction.	Feb. 2023	Inspectors to be trained to ensure ESCP on site.
4. Erosion and Sediment Control Plans Review:		
Review ESCPs by checklist; consider potential water quality impacts	Feb. 2023	Inspectors to be trained to ensure completion of ESCP
5. Construction Site Inspections:		
Inspect sites once during permit term, if sediment is visible/reported in stormwater, or a complaint is filed.	Feb. 2023	Updated inspection documentation procedure
Train inspectors to adhere to minimum inspection requirements to maintain	Feb. 2023	Inspectors to be trained to meet the permit Construction Site Runoff Control requirements

compliance and complete, comprehensive, inspection reports		
6. Enforcement Procedures:		
Develop updated enforcement procedures for qualifying construction sites	Feb. 2023	Updated ordinance and implemented escalating enforcement procedure
7. Construction Runoff Control Training and Education:		
Develop Construction Runoff Control Training for Marion County Staff	Feb. 2023	Training is currently done in person; one-on-one. Training to be developed on cloud-based training system and on regular intervals for existing staff and for new onboards.
8. Tracking and Assessment:		
Track implementation of the Construction Site Runoff Program.	Feb. 2022	Assessment metric: summary of how the implementation of the program was considered successful.

BMPs

1. Ordinance and/or Other Regulatory Mechanism**:** Revise and update the existing Construction Erosion Ordinance (#1307) to reflect the conditions of the general permit.

   Rationale: In 2010 the County implemented the Construction Erosion Ordinance (#1307) to meet the construction erosion requirements of the previous individual permit. However, changes in the general permit such as size requirements for ESCP and requirements for enforcement procedures require the ordinance to be updated. During this update, the County will review the erosion and sediment control program to ensure new expectations and internal processes are effective and meet permit requirements.

2. Compliance with Other NPDES Permits: Refer to DEQ or appropriate DEQ agent to obtain NPDES Construction Stormwater Permit coverage

   Rationale: 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), project sites must be referred to DEQ, or the appropriate DEQ agent, to obtain NPDES Construction Stormwater Permit coverage. The NPDES Construction Stormwater General Permit requirements are in addition to the internal construction site runoff control requirements.

3. Erosion and Sediment Control Plans**:** Review and update ESCP requirements for site operators as well as the County's procedures for documentation and tracking.

Rationale: The Land Development Engineering and Planning (LDEP) Division currently uses a permitting system to ensure construction site operators and developers comply with ESCP requirements. To meet the conditions of the general permit, the threshold for submitting an ESCP must be updated, along with the supplementary materials provided to site operators. Staff will develop or update the ESCP template, inspection checklist, and internal procedures for ESCP review and approval as necessary.

4. Erosion and Sediment Control Plans Review: Review ESCPs from construction projects that will result in land disturbance of one or more acres using a checklist to determine compliance with the ordinance or other regulatory mechanism required. ESCP review procedures must include consideration of the construction activities' potential water quality impacts and remain in accordance with applicable state and local public notice requirements.

   Rationale: This program is undergoing modification. The LDEP and Environmental Services Division will work together to review the current procedures and update them to meet the general permit guidelines.

5. Construction Site Inspections**:** Review and update the Construction Site Inspection procedure which should include triggers for inspection and minimum inspection documentation.

   Rationale: The LDEP's inspection procedures were created in 2010 to fulfill the needs of the individual permit. To comply with the new general permit requirements, an updated procedure will need to be implemented. LDEP and Environmental Specialists will work to update the inspection procedures to meet the current permit expectations

6. Enforcement Procedures**:** Review and update the Construction Site enforcement procedures which should include an escalating enforcement procedure for repeat violations.

   Rationale: The County's Construction Erosion ordinance has been updated to fulfill the current general permit and as such, the enforcement procedures are sufficient to meet the current requirements.

7. Construction Runoff Control Training and Education: Provide orientation and training to all new LDEP staff working to implement the construction runoff control program within 30 days of hire. The staff must be trained and knowledgeable in the understanding of erosion,

sediment, and waste material management controls to conduct ESCP reviews and inspections. All staff must receive training at least once during the permit term and provide follow-up training as procedures and technology change.

Rationale: All staff in the department who conduct work in this area are currently trained. Environmental Services staff will work with LDEP staff to establish a routine training mechanism that stays relevant to the standards and technology of the program. Training records should be retrievable within a reasonable timeframe through the county provided cloud-based management system.

8. Tracking and Assessment: Track implementation of the Construction Site Runoff Program. Evaluate to determine the effectiveness the implementation of the program.

   Rationale: As an ongoing assessment, data throughout the permit year will be collected and monitored. Reports will be produced from the data collected where they can be further analyzed to ensure that the program is meeting permit requirements. This allows for the response to CSRC to be evaluated and improved upon and to be implemented in an efficient and resolute way.

Control Measure: Post-Construction Site Runoff for New Development & Redevelopment

Goal

Implement post-construction stormwater pollutant control program to meet MS4 requirements to reduce discharges of pollutants and address stormwater runoff from new development and redevelopment project sites in the coverage area.

Permittee Intentions

- Implement and enforce a program that reduces the discharge of pollutants and controls stormwater runoff from new development and redevelopment to the MS4
- By an ordinance or other regulatory mechanism, the program will require that qualifying sites use stormwater controls and implement long term operation and maintenance for proper upkeep.

Responsible Person(s)

Implementing these BMPs will be a collaborative effort between the County's LDEP, Engineering staff and Environmental Specialists. LDEP is responsible for reviewing, permitting, and inspecting post construction sites. However, in order to update ordinances and standards they will need input from both Engineering and Environmental Services staff. LDEP will review and provide updates for internal documentation and procedures as well as enforcement. Engineering will review and

provide updates to engineering standards and Environmental Specialists will coordinate meetings, draft new language for ordinances and review final documents to ensure compliance with the general permit.

Measurable Goals

Milestones	Imp.	Deliverables
1. Ordinance and/or Other Regulatory Mechanism:		
Review and update current ordinance; Provide draft for BOC to review; Public comment period; update ordinance #1324	Feb. 2023	Updated ordinance
2. Removing Barriers to Low Impact Development:		
Develop a team to review codes, policy, and ordinances; review codes, policies, and ordinances for barriers to GI or LID implementation; provide recommendations to BOC	Feb. 2023	Barriers; recommendations and changes; updated codes, ordinances, or policies
3. Post-Construction Stormwater Management Requirements:		
Develop a post construction standard review team; review and update post construction standards	Feb. 2023	Updated standards
Review and update enforcement procedures	Feb. 2023	Updated ordinance
4. Post-Construction Site Runoff Plan Review:		
Review and update the site plan review procedures	Feb. 2023	Updated procedures
5. Long-Term Operation and Maintenance:		
Implement a strategy to ensure that all structural stormwater controls installed in compliance and operated and maintained to meet the site performance standard.	Feb. 2023	Implemented Operations and Maintenance Strategy; updated Engineering Standards
6. Training and Education		
Develop Construction Runoff Control Training	Feb. 2023	Training developed
7. Tracking and Assessment:		
Track implementation of the Post-Construction Site Runoff for New Development & Redevelopment Program.	Feb. 2023	Assessment metric: summary of how the implementation of the program was considered successful.

BMPs

1. Ordinance and/or Other Regulatory Mechanism: Revise and update the existing Post Construction Runoff Ordinance #1324 to reflect the conditions of the general permit.

Rationale: In 2010, the County implemented Ordinance #1324 to meet the construction erosion requirements of the previous individual permit. However, changes in the general permit (ex: size requirements for stormwater controls) call for the ordinance to be updated. The enforcement procedures are not sufficient to meet the current requirements of the general permit. Staff will update the ordinance with the new enforcement procedures.

2. Removing Barriers to Low Impact Development**:** Review ordinances, code, and standards for any barriers to implementing green infrastructure or low impact development. If barriers are identified, work to minimize, or remove those barriers within three years.

   Rationale: The County has a large list of codes, policies and ordinances that must be reviewed for barriers to LID and GI implementation. To review these policies, a team from Public Works will be gathered to identify barriers. Once barriers have been identified the group will propose recommendations to the County's management team and the Board of Commissioners for approval and implementation.

3. Post-Construction Stormwater Management Requirements: Review and develop standards that meet the conditions of the general permit. These should include the following:
   a. Structural stormwater control design and specifications
   b. Site performance standards with a numeric stormwater retention requirement
   c. Treatment standards for sites unable to meet the retention standards
   d. Allowance for alternative compliance for sites unable to meet the retention requirements
   e. Stormwater mitigation options for sites that qualify for alternative compliance

   Rationale: The post construction standards are used by LDEP, capital projects and the general public during post-construction development. As such, to develop a set of standards that meet permit requirements and fulfill the needs and expectations of those who use them, a team from Public Works will be gathered to provide input in the changes. Representatives will assist in reviewing the County's 2012 Draft Interim Standards, review other jurisdiction's standards and propose updates.

4. Post-Construction Site Runoff Plan Review**:** Review and update the Post Construction Site Runoff Plan Review procedures. Review and approve plans for structural stormwater controls at new development and redevelopment sites

Rationale: LDEP is responsible for the review of all post construction plans submitted to the County. With multiple staff members potentially performing a review of the plans, it is important to have a documented procedure. This can be used by all staff performing the Site Runoff Plan Review to ensure consistency in evaluations and to provide site operators with a better understanding of County expectations. To comply with the general permit, this procedure will be reviewed and updated by staff.

5. Long-Term Operation and Maintenance: Implement a strategy to ensure that all structural stormwater controls installed in compliance and operated and maintained to meet the site performance standard.

   Rationale: An Operations and Maintenance Strategy has been developed and implemented. The County's LDEP, Capital Projects, and Environmental Services staff have worked diligently to update the Engineering Standards. The draft is being proposed to county leadership and will potentially be instated prior to the February 28, 2023, deadline.

9. Training and Education: Provide orientation and training to all new LDEP staff working to implement the Post-Construction Site Runoff for New Development & Redevelopment Program within 30 days of hire. The staff must be trained and knowledgeable in the understanding of erosion, sediment, and waste material management controls to conduct ESCP reviews and inspections. All staff must receive training at least once during the permit term and provide follow-up training as procedures and technology change.

   Rationale: All staff in the department who conduct work in this area are currently trained. Environmental Services staff will work with LDEP staff to establish a routine training mechanism that stays relevant to the standards and technology of the program. Training records should be retrievable within a reasonable timeframe through the county provided cloud-based management system.

6. Tracking and Assessment: Track implementation of the Post-Construction Site Runoff for New Development & Redevelopment Program. Evaluate to determine the effectiveness the implementation of the program.

   Rationale: As an ongoing assessment, data throughout the permit year will be collected and monitored. Reports will be produced from the data collected where they can be further analyzed to ensure that the program is meeting permit requirements.

Control Measure: Pollution Prevention & Good Housekeeping for Municipal Operations

Goal

Operate and maintain facilities, using prudent pollution prevention and good housekeeping to reduce the discharge of pollutants through the MS4 to waters of the state.

Permittee Intentions

- Implement a program that ensures prudent pollution prevention and good housekeeping practices are used to reduce the discharge of pollutants from municipal operations
- The program will utilize a variety of methods to train staff on pollution prevention practices and ensure that good housekeeping practices are being utilize during day-to-day municipal activities.

Responsible Person(s)

Implementing these BMPs will be a coordinated effort between Road Operations, Stormwater Operations and Environmental Specialists. Stormwater Operations will be responsible for mapping and inspecting stormwater controls as well as inspecting catch basins. Road and Stormwater Operations will be responsible for implementing all BMPs during day-to-day activities. Finally, Environmental Specialist will be responsible for updating the BMP procedures and implementing training programs. The Road Operations Division Manager and Supervisors along with the Environmental Services Program Supervisor are responsible for ensuring the implementation.

Measurable Goals

Milestones	Imp.	Deliverables
1. Operation and Maintenance Strategy for Existing Structural Stormwater Controls:		
Document all existing stormwater controls in the MS4; develop an annual maintenance plan for O&M	Feb. 2022	Updated map; maintenance plan and documented work
2. Inspection and Cleaning of Catch Basins:		
Develop an annual maintenance plan; inspect catch basins annually	Feb. 2022	Updated map; documentation of inspections
3. Pollution Prevention in Facilities and Operations:		
Review the existing BMP document; compare practices to other jurisdictions; update BMPs as necessary	Feb. 2022	Updated BMP guide
4. Registrant-owned NPDES Industrial Stormwater Permit Facilities:		
Ensure owned and operated industrial facilities are covered under NPDES Industrial Stormwater Permit	Feb. 2022	All qualifying sites covered under permit
5. Requirements for Pesticide and Fertilizer Applications:		

Implement Pesticide and Fertilizer BMPs	Feb. 2022	BMP trainings held; BMP manual to be updated as needed
4. Litter Control:		
Document all solid waste removed from the MS4 through the course of daily operations; develop a plan to reduce most frequent materials	Feb. 2022	Documentation of waste; litter reduction plan
5. Materials Disposal:		
Implement proper disposal program for waste materials collected in the process of standard operations and maintenance.	Feb. 2022	BMP trainings held; BMP manual to be updated as needed
6. Stormwater Infrastructure Staff Training:		
Develop BMP training program; implement training program for new hires; train employees on BMPs once per year	Feb. 2022	Updated training program; documentation of participants
7. Tracking and Assessment		
Determine type of assessment and activity to assess; implement assessment; implement findings in following year	Feb. 2022	Assessment metric: summary of how the implementation of the program was considered successful.

BMPs

1. Operation and Maintenance Strategy for Existing Structural Stormwater Controls**:** Develop and implement an operations and maintenance strategy for all existing stormwater controls that discharge into the MS4.

   Rationale: The County's post-construction requirements require certain sites to install stormwater controls within the MS4. However, documenting and inspecting these controls has been inconsistent in the past. To ensure compliance with the permit, LDEP and Capital Projects will develop a comprehensive list of stormwater controls in the MS4. Once all the controls have been documented, the Environmental Services Program Supervisor will develop an annual plan for the Stormwater Operations team to inspection and maintain.

2. Inspection and Cleaning of Catch Basins**:** Develop and implement a strategy to inspect and maintain at least 50% of the catch basins and inlets within the MS4.

   Rationale: Stormwater operations crews already inspect and clean catch basins within the MS4 on a regular basis. However, to ensure that there is evidence of meeting the permit expectations, the Environmental Services Specialists are developing an annual plan and working in coordination with the Marion County IT Department to implement GIS tracking

mechanisms. Stormwater Operations will provide documentation upon inspection and cleaning each catch basin.

3. Pollution Prevention in Facilities and Operations**:** Revise and update the existing best management practices document and ensure proper procedures are in place for the following activities:
    a. Pipe cleaning for stormwater and wastewater conveyance systems
    b. Cleaning of culverts conveying stormwater in roadside ditches
    c. Ditch Maintenance
    d. Road and bridge maintenance
    e. Road repair and resurfacing including pavement grinding
    f. Dust control for roads and municipal construction sites
    g. Winter road maintenance including salt or de-icing
    h. Fleet maintenance and vehicle washing
    i. Building and sidewalk maintenance including washing
    j. Solid waste transfer and disposal areas
    k. Municipal landscape maintenance
    l. Material storage and transfer areas including fertilizer and pesticide, hazardous material, used oil storage and fuel
    m. Firefighting training activities
    n. Maintenance of municipal facilities including public parks and open space, golf courses, airports, parking lots, swimming pools, marinas, etc.
    o. Application and disposal of pesticides and fertilizers
    p. Material disposal that is removed during maintenance, treatment, control of stormwater or wastewater

    Rationale: The County updated the Marion County Best Management Practices for Clean Water document in 2022. Since it covers many different municipal activities, it is important that those BMPs are reviewed and updated to meet current expectations. An Environmental Specialist will continue to review the BMP document and BMP activities and compare with current standards and outside agencies to update the document accordingly.

4. Registrant-owned NPDES Industrial Stormwater Permit Facilities**:** Ensure owned and operated industrial facilities are covered under NPDES Industrial Stormwater Permit.

    *Rationale***:** All qualifying sites under Marion County's authoritative jurisdiction are currently covered under the NPDES permit. The North Marion County Disposal Facility (File Number:

103964; EPA Number: ORR501463) is currently compliant with the 1200-Z Industrial Stormwater Permit. There are no other qualifying sites under the County's jurisdiction.

5. Requirements for Pesticide and Fertilizer Applications: Implement practices to reduce the discharge of pollutants to the MS4 associated with storage of pesticides and fertilizers. Focusing on County-owned right-of-way, parks, or other operational facilities, employees or contractors applying pesticides must follow all label requirements, including those regarding application methods, rates, number of applications allowed, and disposal of the pesticide, fertilizer and rinsate.

   Rationale: Road operations crews abide by the rules written in the BMP manual regarding the storage of pesticides and fertilizers.

6. Litter Control: Implement a method to reduce litter within MS4 by working cooperatively with other departments and entities on a regular basis (example: Adopt-a-Road).

   Rationale: Road operations crews remove solid waste and debris from roadways, ditches and catch basins throughout the county, including the MS4 areas. To show compliance with the general permit, staff who retrieve and dispose of wastes generally capture and track the materials that they remove through a Public Works Dispatch Log. An Environmental Specialist will review the data periodically and consider a litter reduction plan that would address the root causes of the most frequent materials being found.

7. Materials Disposal: Materials and pollutants removed in the course of maintenance, treatment, control of stormwater, or other wastewaters must be managed and disposed of in a manner to prevent pollutants from entering conveyance systems or open waterways.

   Rationale: The BMP manual addresses material disposal during the course of regular maintenance. Excess materials are deposited above the 100- year floodplain, at a supervisor approved site, and not within 75' of a stream, wetland, or riparian area. Crews are directed to follow the Erosion Control Table provided within the manual (Appendix A)

8. Stormwater Infrastructure Staff Training**:** Develop and implement a program to train all new staff working to implement pollution prevention for municipal operations within 30 days of hire and at least once during the permit term.

   Rationale: Since 2009, the County has been implementing BMP training for all municipal operations crews. However, with newer technology and updated BMP strategies, there is

an opportunity to update how training is implemented. To meet permit requirements, staff should be trained once upon hire and once a year as a refresher. An Environmental Specialist will update these trainings and provide them to all appropriate employees.