



O R E G O N

# MARION COUNTY PUBLIC WORKS TOTAL MAXIMUM DAILY LOAD Annual Report

July 1, 2022- June 30, 2023

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## ACRONYMS

BMP	Best Management Practice
CSRC	Construction Site Runoff Control
DEQ	Department of Environmental Quality
DMA	Designated Management Agency
IDDE	Illicit Discharge Detection & Elimination
MC	Marion County
MCPW	Marion County Public Works
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
O2WA	Oregon Onsite Wastewater Association
OWS	Onsite Wastewater Specialist
PCSRNDR	Post-Construction Site Runoff for New Development & Redevelopment
PEO	Public Education & Outreach
PIP	Public Involvement & Participation
PPGHMO	Pollution Prevention & Good Housekeeping for Municipal Operations
SWMP	Stormwater Management Plan
TMDL	Total Maximum Daily Load

## PROGRAM OVERVIEW

### STATUS REPORT

Marion County (MC) is recognized by the Oregon Department of Environmental Quality (DEQ) as a Designated Management Agency (DMA) for the Middle-Willamette (HUC8: 17090007), Molalla-Pudding (HUC8: 17090009), and North Santiam (HUC8: 17090005) River subbasins. As such, the County has submitted a Total Maximum Daily Load (TMDLs) Implementation Plan to DEQ that addresses the actions that the County will take to reduce the impact of the named non-point source pollutants to these subbasins. While the Plan was created for specific watersheds, MC implements some strategies shown in the matrix in Appendix A countywide, regardless of watershed boundary.

Additionally, the Oregon DEQ has recognized MC as an operator of a Small Municipal Separate Storm Sewer System (MS4) under the National Pollutant Discharge Elimination System (NPDES) Phase II General Permit. The County has developed and implemented a comprehensive Stormwater Management Plan (SWMP) to fulfill the requirements of the permit. Although the SWMP was primarily written to manage stormwater within the Salem/Keizer urban growth boundary (UGB), many of the activities outlined in the SWMP also address TMDL requirements. NPDES SWMP Control Measures relating to Public Education and Outreach, Public Involvement and Participation, and Pollution Prevention and Good Housekeeping for Municipal Operations are implemented countywide and therefore are part of the County's TMDL report.

To efficiently manage the NPDES Permit and the TMDL Program, MC staff seek areas in which one program strategy will overlap beneficially and simultaneously to meet the needs of the other program. In continuing a historic process, the County has included the NPDES MS4 Phase II General Permit Annual Report as part of this Annual TMDL Report. For specific information regarding MC's SWMP Control Measures, refer to the NPDES MS4 Phase II General Permit Annual Report provided in Appendix C.

## Public Education & Outreach

### *Digital Media Campaigns*

The Marion County Public Works (MCPW) Communications Coordinator oversees and implements strategic social media campaigns aimed at educating the public about relevant water quality issues such as stormwater pollutant impacts and hazards to the environment, best management practices, and methods of waste reduction. The County also participates in Clean Water Partners, a group that produces and advertises water quality messaging on a regional scale, reaching a large existing audience.

### *In-Person Experiences*

The County has continued its education and outreach efforts by conducting demonstrations and offering learning activities in Salem-Keizer School District classrooms. During the 2022-23-year, MC helped to facilitate and participate in the Annual Water Festival, an event hosted by the Mid-Willamette Outreach Group (MWOOG). This event is tailored for a 5<sup>th</sup> grade audience and concentrates on water pollutants and aquatic species and habitats.

The Annual Earth Day event hosted at Spong's Landing Park featured seven tabling partners from local agencies, including Master Gardeners, Master Food Preservers, Marion Soil and Water Conservation District, Pudding Watershed Council, City of Salem's Clean Streams Clear Choices Initiative, Marion Resourcers, and the Mid-Valley Garbage and Recycling Association. These partners provided information specific to their programs to community members. During the event, MC hosted an erosion control and stream bank stabilization demonstration. This year's Annual Earth Day Celebration's Passport to Sustainability activity earned third place for Most Innovative Communication at the City-County Communications & Marketing Association 2023 Savvy Awards in Florida.

Before the 2020 Beachie Creek Fire, interpretive signage was in place along the Powder House Trail at Niagara Park. Unfortunately, six of Marion County's parks, including Niagara Park, suffered significant damage during the wildfire event. Repair and restoration efforts are currently underway with five out of the 18 MC parks are still closed. As these parks are gradually restored, new interpretive signage will be installed. This signage will include multi-lingual information pertaining to riparian buffers, salmon biology, hydrology, and stream ecology.

### *Proper Pet Waste Disposal & The Effects of Bacteria on Waterways*

To address issues of bacteria, MC provides pet waste stations at County Parks. A total of eight dispensers have been installed at various MC parks: Spongs Landing (2), Scotts Mills, Rogers Wayside, Joryville, Eola Bend, Bonesteele, and Packsaddle. The selection of these MC Park locations was based on their proximity to waterbodies and whether pets were allowed in those areas. These stations include appropriate signage and a dispenser for disposable (biodegradable) bags that visitors can use to clean up after their pets. There are also designated locations to dispose of the waste with provided trash receptacles. MC is planning to install an additional dispenser and create an enclosed dog park area at Parkdale Park in northeast Salem which also features a wetland area.

### *Parks Facilities*

All county parks are open to the public and are equipped with either permanent or temporarily installed restroom facilities. Additionally, refuse containers are provided to minimize potential bacteria and litter contamination. These facilities and receptacles undergo daily maintenance during periods of high visitor traffic. During slower periods, the frequency of maintenance is adjusted, typically on a weekly basis, or at the discretion of the Parks Supervisor. Maintenance tasks involve clearing debris and emptying waste containers, as well as addressing any trash or debris left on the grounds.

### *Septic Installation & Maintenance*

To prevent bacterial exposure from private septic systems, brochures and letters on septic care are distributed throughout the year and made available on the MC webpage. Additional resources include videos, lecture series, and pre-crafted materials such as EPA Septic Smart and DEQ Septic Smart. Periodic postings are also scheduled throughout the year to raise awareness among homeowners about septic system maintenance. The MCPW Building Inspection Division's Onsite Wastewater Specialists (OWS) host an annual septic installer training class in the Spring and presented at the O2WA (Oregon Onsite Wastewater Association) Annual Conference. Historical conference presentations have covered topics like Soils and Septic 101, Fire and Septic, as well as roundtable discussions.

## **Public Involvement & Participation**

### *Committees*

Marion County hosts the Marion Water Quality Advisory Committee established to provide guidance and direction to MC staff and to make recommendations regarding stormwater, water quality, educational outreach, regulations, and other county programs. The County also collaborates with the County Planning Commission, Service Districts, and the Board of Commissioners when introducing or implementing new programs or policies. Meetings with the County Commissioners or other committees are noticed in accordance with ORS 192.640(1). Marion County also partners with other jurisdictions and agencies to provide opportunities for public involvement. The County will continue to seek opportunities to engage the public to improve water quality.

### *Litter Clean-Up*

Marion County's Operations Division has been overseeing the Adopt-a-Road litter clean-up program year-round since the early 1990s. The only time in which the program was halted was during the period when COVID restrictions were in place. County residents are also encouraged to report incidents of illegal dumping or discharges through walk-ins, phone calls, or email..

### *Storm Drain Stenciling Kits & Curb Markers*

The Environmental Services Division provides stenciling kits to businesses, neighboring agencies, and individuals for marking inlets on private lots. Volunteers are also encouraged to participate in the application and tracking of storm drain curb marking in the public right-of-way. These curb markers and stencils serve as a reminder to prevent non-stormwater waste from entering the storm drainage system.

### *Marion Resourcers Program*

The Marion Resourcers Program, operated by MC, shares a framework like the Master Recycler Program. It is offered several times annually and encompasses a mandatory Water Quality learning segment. This component covers current water quality regulations, MC's initiatives, actionable steps citizens can take to improve water quality, and life-cycle analyses of various products or materials that impact it.

## **Pollution Prevention & Good Housekeeping for County Operations**

### *BMP Program*

The Marion County Environmental Services Division has developed and implemented a computerized training program focusing on Best Management Practices for Clean Water. This training is accessible to all Public Works staff and is mandatory for individuals in operations or maintenance roles. It comprehensively addresses various aspects of current water regulations, the definition of stormwater and associated pollutants, and defines the beneficial uses for clean water. Additionally, the program offers valuable guidance on best practices for field and shop work, with a dedicated and substantial portion devoted to the necessary aspects of erosion and sediment control.

This training program is conveniently hosted on the County's learning management system. Each staff member is assigned to complete the course within the initial 30 days of their employment, typically accomplished within the first two days as part of their onboarding process. Additionally, staff members are required to revisit this training every five years. This practice ensures a sustained level of compliance and proficiency among staff members.

### *Education and Outreach*

MC has implemented an annual Best Management Practices (BMP) field training program open to both internal staff and other municipalities. This course provides in-depth instruction on BMPs for erosion and sediment control as well as proper spill containment techniques. A specialized consultant has been contracted to provide in-person instruction for implementing erosion control standards. These standards will not only be integrated into the training but will also serve as a foundational benchmark for all operations and maintenance procedures going forward.

### *BMP Implementation, Performance Monitoring, and Evaluation*

Road Operations Supervisors and Crew Leads are entrusted with the responsibility of overseeing the implementation of BMPs by operations crews. They play a crucial role in ensuring that these practices are effectively utilized in the field to uphold environmental standards for erosion control.

### *Stormwater System Inspections & Maintenance*

Publicly owned stormwater controls within MC receive routine inspections and maintenance conducted by both Road Operations and Stormwater Operations crews. The funding for these countywide services is derived from gas taxation as well as a Stormwater Fee Assessment for maintenance conducted within the designated Stormwater Management Area. This dual-source funding mechanism ensures the continued effectiveness and longevity of these vital stormwater management systems for the benefit of the community.

### *Vegetation Management*

Vegetation management is executed through various programs administered by the Road Operations, Stormwater Operations, and Parks Divisions within Public Works. Those tasked with herbicide application hold proper licensing and undergo regular training to maintain their certification. The Best Management Practices for Clean Water Manual, along with its associated training, provides comprehensive guidelines for the safe use and storage of pesticides, herbicides, and fertilizers (refer to the *BMP Program* section for details).

Marion County's Engineering Division supplies a comprehensive list of suitable plant species for both staff and contractors. There's a strong emphasis on advocating for the use of native plant species, especially in proximity to waterways and within water treatment facilities, whether for maintenance, development, or redevelopment in the Stormwater Management Area (SWMA). Additionally, the County actively participates in a Noxious Weed Program, collaborating with the Marion Soil and Water Conservation District to eradicate invasive plants from properties, parks, and the right-of-way.

Marion County's Environmental Services Division organized a Weed Wrangle event at North Santiam Park, specifically in the area impacted by wildfires, on June 4th. This event was tailored for residents and businesses that live in the fire-affected area and taught them tips and tricks on identifying and effectively removing post-fire invasive plants. This event was in partnership with the North Santiam Watershed Council and the Marion Soil and Water Conservation District.

### *Riparian Restoration, Stream Bank Stabilization, & Enhancement*

To combat rising temperatures and mitigate stream bank erosion in both rural and urban environments, MC has instituted a program offering native trees to community members for riparian restoration projects. Through collaboration with watershed councils across the county, MC provides complimentary native trees and shrubs to individuals or groups undertaking riparian projects aimed at enhancing stream coverage and reducing temperatures within the basin.

Marion County Parks has undertaken extensive efforts to restore county-owned green spaces that were severely affected by recent natural disasters. Their restoration endeavors have resulted in the planting of an impressive 35,794 native trees and shrubs in Packsaddle, Minto, and North Fork Parks. This included a public involvement opportunity hosted on April 2, 2023, where 31 volunteers came to help plant over 600 trees in Packsaddle Park. Plans to replant the other three fire-affected parks as well as right-of-way in the burned area are underway. The County has won three post-fire recovery grants from the Oregon Watershed Enhancement Board, totaling over \$1.3 million to help with replanting upland and riparian areas, planning for climate resiliency, efforts toward floodplain connectivity and enhancement, and more.

Furthermore, a "Free Tree Giveaway" event held at North Santiam Park on April 1, 2023, saw a total of 17,832 native trees and shrubs generously donated to citizens and successfully planted. This giveaway event was a collaborative effort, made possible through partnerships with the North Santiam Watershed Council, Bonneville Environmental Foundation, Santiam Canyon Long Term Recovery Group, and the Oregon Department of Forestry. Looking ahead, the Environmental Services Division has set an ambitious goal of 360,080 plantings by the year 2025.

## URBANIZED AREA MANAGEMENT STRATEGIES & MEASURES

### Illicit Discharge Detection & Elimination

See 2022-23 NPDES MS4 Phase II General Permit Annual Report in Appendix C

### Construction Site Runoff Control

#### *Mercury TMDL CSRC Implementation*

The implementation of this management strategy is set to occur before the September 3, 2025, deadline. As acceptable strategies to meet these requirements were not confirmed with the development of this document, the list below shows both a preferred action and substitute actions:

- |                     |   |
|---------------------|---|
| Preferred action:   | <ul style="list-style-type: none"><li>• Apply the 1200-CN program county-wide; this will necessitate an expansion of the Construction Erosion and Sediment Control ordinance throughout the county. (Scheduled for March 2025)</li></ul>  |
| Substitute actions: | <ul style="list-style-type: none"><li>• Develop a strategy for high potential residential and commercial development (Scheduled for May 2024)</li><li>• Determine the proper legal authority for requiring construction and erosion control measures (Scheduled for May 2024)</li><li>• Develop the legal authority to require construction and erosion control measures (Scheduled for March 2025)</li></ul> |

## AGRICULTURAL & FOREST LAND

Stormwater management for agricultural and forest lands falls outside the jurisdiction of MC. Instead, it will be addressed in alignment with established federal and state regulations and plans. This includes initiatives such as SB 1010 Ag Water Quality Management Area Plans, the implementation of Federal Forest Lands and Resource Management Plans, adherence to the Oregon Forest Practices Act, and the execution of Water Quality Restoration Plans on Bureau of Land Management and United States Forest Service land.

## TABLES

**TABLE A: TMDL BMPS & MEASURABLE GOALS**

**Objective:** *Improve water quality in the Middle-Willamette (HUC: 17090007), Molalla-Pudding (HUC: 17090009), and North Santiam (HUC: 17090005) Subbasins, and fulfill the requirements of the TMDL program by deploying BMPs across each watershed on a countywide scale.*

BMP	MEASURABLE GOAL	IMPLEMENTATION	ONGOING	MODIFIED
Digital Media Campaigns	# of posts and campaigns	✓	✓	
In-Person Experiences	# events	✓	✓	
Pet Waste Disposal	# of interpretative Parks signage, distributed dog waste bags	✓	✓	
Parks Facilities	# of facilities added, installed, and/or maintained	✓	✓	
Septic Installation & Maintenance	# of events, materials created and distributed	✓	✓	
Litter Clean-Up	# of tons of waste, illegal dumpings, tires, furniture, deer carcasses, and deceased animals removed from right-of-way	✓	✓	
Vegetation Management	# of trainings	✓	✓	
Riparian Restoration	# of volunteer hours, native plants and shrubs planted, of events	✓	✓	

**TABLE B: TMDL BMP ASSESSMENT PARAMETERS**

*The table below shows the results of information collected during the reporting period.*

BMP	ASSESSMENT PERIOD: JULY 1, 2022 – JUNE 30, 2023
Digital Media Campaigns	Social media campaigns totaled over 30 postings. Water quality topics included stormwater connectivity, pet waste, erosion and sediment control, low-impact development and green infrastructure, yard debris disposal, car washing, native tree and shrub planting, fertilizer and pesticide use, septic system hints and tips, and invasive species awareness.
In-Person Experiences	MC hosted or participated in various events that promoted water quality themes, including Earth Day, the Earthwise Sustainability Summit, Erosion Control Summit, Water Festival, and four August Water Month Litter Cleanups, among others.
Pet Waste Disposal	MC has nine pet waste stations with signage installed at eight parks. Signage and stations that were damaged during the 2020 wildfires are being replaced as parks are restored. A total of 19,200 bags pet waste bags were purchased during the 2022-23 year for distribution.
Parks Facilities	There are 16 developed parks and four undeveloped parks in MC which are maintained weekly. MC parks have permanent or temporary restroom facilities in place. During busy periods, additional restroom facilities will be added, and frequency of garbage removal will be increased as needed. Wildfire damaged facilities in the process of being repaired and replaced.
Septic Installation & Maintenance	OWS host an annual septic installer training class and present least once annually at the Oregon Wastewater Association O2WA Annual Conference. OWS worked in collaboration with DEQ to produce a guidance document, hosted on DEQ's webpage.
Litter Clean-Up	13.9 tons of waste, 613 illegal dumpings, 428 tires, 229 pieces of furniture, 242 deer carcasses, and 140 dead animals were removed from the right-of-way.
Vegetation Management	BMPs for Clean Water Manual updated. An improved and interactive ArcGIS Storymap version of the training is in the approval process. MC staff continued to maintain existing applicator licensing through offered vegetation maintenance trainings (59 total hours).
Riparian Restoration	MC partnered with the Pudding River Watershed Council to plant 215 native trees and shrubs along the impaired Bochsler Creek during the 2022-23 year. Over 30,000 have been funded and planted since the program began. MC Parks intends to complete 360,080 new plantings in the Santiam Canyon Recovery area by 2025. In the north Salem area, 3,750 native plants were planted along the Claggett Creek by internal MC Stormwater Operations staff.

## FUTURE IMPLEMENTATION

### GOALS

During the upcoming reporting year, MC will focus on the following initiatives:

- Compliance Updates for TMDL and NPDES Phase II Permit Programs: MC will continue to make updates to meet compliance timelines for the Total Maximum Daily Load (TMDL) and Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Phase II General Permit programs.
- Education and Outreach Efforts: MC will continue to provide educational materials through the website, social media, events, and trainings. Metrics will be tracked to improve and expand future outreach efforts.
- Collaboration with External Partners: MC will maintain collaborations with external agencies, organizations, and regional groups to explore opportunities for further collaboration in promoting awareness of water quality issues.
- Riparian Restoration Funding: MC will continue to fund riparian restoration opportunities for community members through the Stream Tree Program. Additional grants and funding opportunities for riparian restoration projects will be cross promoted.
- BMP Training Program Implementation: The MC BMP for Clean Water Manual will be periodically updated and used as a guidance document for internal staff. Operational staff will receive training (as per internal requirement) and appropriate guidance to ensure minimal impact on water quality.
- Enforcement of Prohibited Pollutants: MC aims to reduce mercury-related discharges into County waterways. This will be achieved by reinforcing the Illicit Discharge Detection and Elimination program through educational social media campaigns and improved GIS tracking and reporting. The County seeks to work in partnership with State agencies to address deficiencies in the removal of illicit discharges and to improve efficiency in the reporting. A countywide ordinance is being developed to capture turbid water in the county-maintained right-of-way, and an alternative proposal is being considered to extend the existing Illicit Discharge ordinance countywide.
- Construction Site Runoff Control: Erosion control within the SWMA is already established through ordinances and rules set by the Land Development Engineering and Permits Division. To meet upcoming Construction Site Runoff Control Mercury TMDL requirements, MC plans to adopt the existing SWMA DEQ 1200-CN Permit Program countywide. Alternative actions include developing a strategy for high-potential residential and commercial development, determining proper legal authority for requiring construction and erosion sediment control measures, or establishing legal authority for these measures.

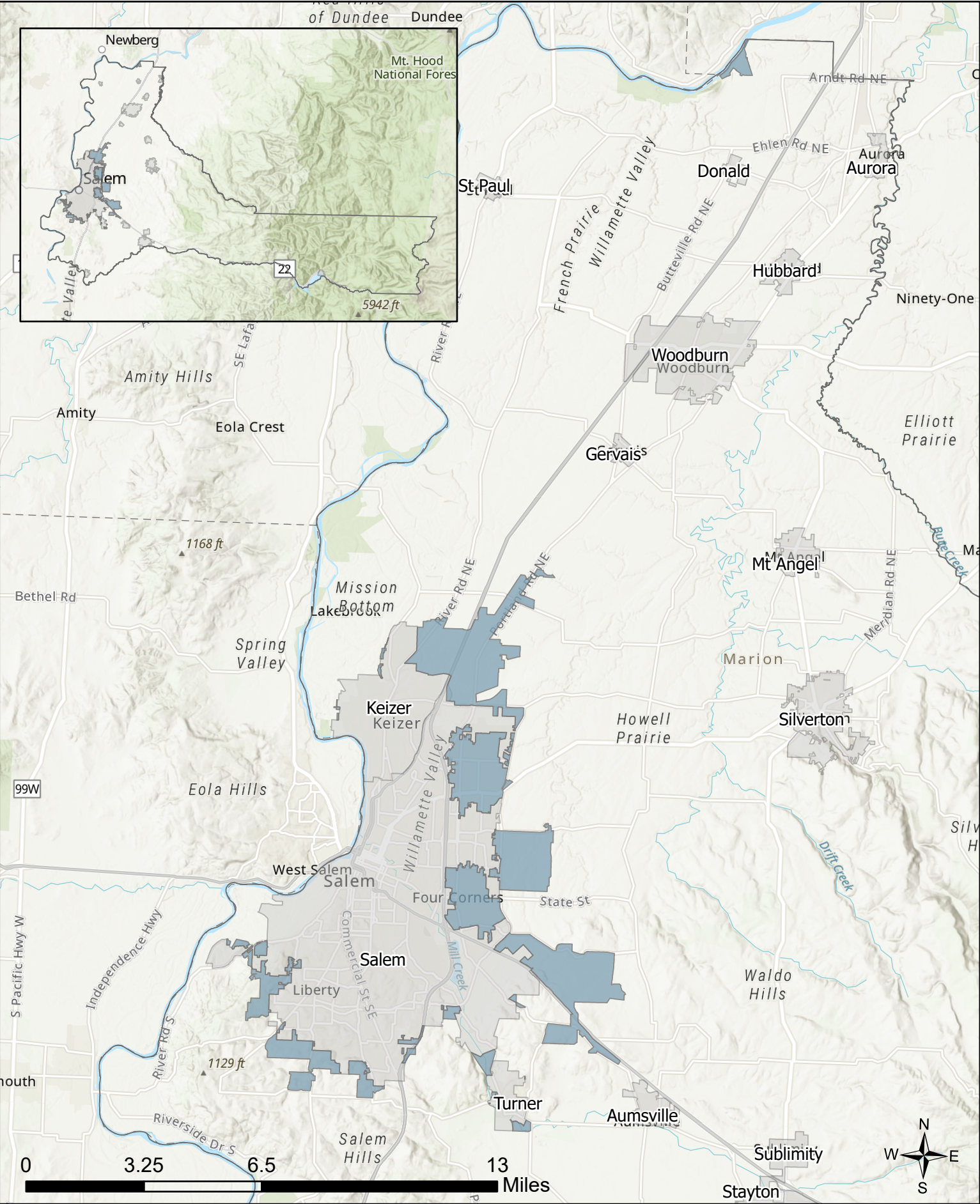
## APPENDICES

- Appendix A: Stormwater Management Area Map
- Appendix B: Implementation Matrix
- Appendix C: 2022-23 NPDES MS4 Phase II General Permit Annual Report

## APPENDIX A: STORMWATER MANAGEMENT AREA MAP



# Marion County MS4 Stormwater Management Area



APPENDIX B: IMPLEMENTATION MATRIX



MARION COUNTY - MANAGEMENT STRATEGIES 2022-2023																
TMDL IMPLEMENTATION MATRIX																
MANAGEMENT STRATEGY	ACTION CATEGORY	SWMA ONLY	PRACTICE	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS/ EVALUATION	BACTERIA	TEMPERATURE	MERCURY	PESTICIDES	NITRATES	METALS	NPDES PHASE II MS4
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; Stormwater Fees	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; Stormwater Fees	Tracking of completion and thoroughness of inspections	Completed	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; Stormwater Fees	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; Stormwater Fees	Approved	Completed	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-wide 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)	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	No timeline	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	Propose adoption of countywide ordinance to implement illicit discharge of turbid water into county maintained ROW. An alternative proposal is to extend Illicit Discharge ordinance county-wide.	Accounted for in annual budget	Number of complaints	March 3, 2024	Proposal to BOC in March 2023. Adoption of ordinance late 2023. Implementation early 2024.	Ordinance drafts in the process of review; continued communication with county leadership, county legal counsel, and water quality advisory committees.	✓		✓	✓	✓	✓	✓
EPP	Illicit Discharge	✓	Legal Prohibition and Enforcement Ordinance	Develop an ordinance to address dumping of illicit discharge in MC.	Accounted for in annual budget; Stormwater Fees	Implementation	Completed	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	MC has ability to track chronic illicit discharges through ArcGIS database and retrieve owner and geolocation information (realtime).	✓		✓	✓	✓	✓	✓
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	✓		✓	✓	✓	✓	✓

MARION COUNTY - MANAGEMENT STRATEGIES 2022-2023																
TMDL IMPLEMENTATION MATRIX																
MANAGEMENT STRATEGY	ACTION CATEGORY	SWMA ONLY	PRACTICE	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS/ EVALUATION	BACTERIA	TEMPERATURE	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	Completed; 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		Digital Media Campaigns & 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	Social media campaigns totaled over 30 postings. Water quality topics included stormwater connectivity, pet waste, erosion and sediment control, low-impact development and green infrastructure, yard debris disposal, car washing, native tree and shrub planting, fertilizer and pesticide use, septic system hints and tips, and invasive species awareness.	✓		✓	✓	✓		✓
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	Communication 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:\Environmental 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		In-Person Experiences	MC will continue to partner with community groups to host community events.	Accounted for in annual budget	Number of events	Completed; ongoing	Number of events to remain consistent with prior year's events	MC hosted or participated in various events that promoted water quality themes, including Earth Day, the Earthwise Sustainability Summit, Erosion Control Summit, Water Festival, and four August Water Month Litter Cleanups, among others.			✓		✓	✓	

MARION COUNTY - MANAGEMENT STRATEGIES 2022-2023																
TMDL IMPLEMENTATION MATRIX																
MANAGEMENT STRATEGY	ACTION CATEGORY	SWMA ONLY	PRACTICE	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS/ EVALUATION	BACTERIA	TEMPERATURE	MERCURY	PESTICIDES	NITRATES	METALS	NPDES PHASE II MS4
PE&O	Education & Outreach		Septic Installation & Maintenance	Marion County will focus on detecting and correcting illicit discharges from failing septic systems; employ educational outreach strategies encompassing videos, lecture series, and readily available resources such as the EPA Septic Smart and DEQ Septic Smart materials. This effort holds particular significance for properties situated in close proximity to receiving waters, as septic effluent discharges can significantly impact water quality.	Accounted for in annual budget	Video views; inspection counts; customer interactions	Completed; ongoing	Outreach campaign once per permit term	OWS host an annual septic installer training class and present least once annually at the Oregon Wastewater Association O2WA Annual Conference. OWS worked in collaboration with DEQ to produce a guidance document, hosted on DEQ’s webpage.	✓				✓		
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			✓				
PE&O	Education & Outreach		Interpretive Signage 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	Before the 2020 Beachie Creek Fire, interpretive signage was in place along the Powder House Trail at Niagara Park. Unfortunately, six of Marion County’s parks, including Niagara Park, suffered significant damage during the wildfire event. Repair and restoration efforts are currently underway with five out of the 18 MC parks are still closed. As these parks are gradually restored, new interpretive signage will be installed. This signage will include multi-lingual information pertaining to riparian buffers, salmon biology, hydrology, and stream ecology.	✓						
PE&O	Education & Outreach		Pet Waste Disposal	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	MC has nine pet waste stations with signage installed at eight parks. Signage and stations that were damaged during the 2020 wildfires are being replaced as parks are restored. A total of 19,200 bags pet waste bags were purchased during the 2022-23 year for distribution.	✓						
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							✓

MARION COUNTY - MANAGEMENT STRATEGIES 2022-2023  
TMDL IMPLEMENTATION MATRIX

MANAGEMENT STRATEGY	ACTION CATEGORY	SWMA ONLY	PRACTICE	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS/ EVALUATION	BACTERIA	TEMPERATURE	MERCURY	PESTICIDES	NITRATES	METALS	NPDES PHASE II MS4
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	Postings are shared through social media campaigns; volunteers participated in four litter clean-up events this year.	✓						
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.			✓				
POST-CON	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; Stormwater Fees	Implementation	Completed	2021 draft ordinance	Complete; associated Engineering Standards have been revised and adopted by BoC	✓		✓	✓	✓	✓	✓
POST-CON	Construction & Development	✓	Post-Construction Inspections	Develop a program that involves periodic inspection of post-construction measures to assure effective operation of these features.	Accounted for in annual budget; Stormwater Fees	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			✓			✓	✓
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	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.	Accounted for in annual budget	Training attendance records	Upon hire (within 30 days) and at 5 year intervals	Manual updated in Spring 2022	Periodic review; BMPs for Clean Water Manual updated 2022. An improved and interactive ArcGIS Storymap version of the training is in the approval process.	✓	✓	✓	✓	✓	✓	✓
PP&GHCO	BMP		Field BMP Training (Internal)	Field staff and operational crews receive training that explains water quality regulations and BMPs	Accounted for in annual budget; road operations funds	Training attendance records	Held annually; once at onboarding and at 5-year intervals	Annual participation	Undergo periodic reviews; updates based on relevant advancements in BMP strategies	✓	✓	✓	✓	✓	✓	✓
PP&GHCO	BMP		Field BMP Training (External)	External municipalities have the opportunity to receive training that provides an explanation of water quality regulations and Best Management Practices (BMPs).	Accounted for in annual budget; road operations funds	Training attendance records	Held annually; optional	Annual participation	Undergo periodic reviews; updates based on relevant advancements in BMP strategies	✓	✓	✓	✓	✓	✓	✓
PP&GHCO	BMP		Vegetation Management	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	MC staff continued to maintain existing applicator licensing through offered vegetation maintenance trainings (59 total hours).		✓		✓			
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)	✓	✓	✓	✓	✓	✓	

MARION COUNTY - MANAGEMENT STRATEGIES 2022-2023  
TMDL IMPLEMENTATION MATRIX

MANAGEMENT STRATEGY	ACTION CATEGORY	SWMA ONLY	PRACTICE	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS/ EVALUATION	BACTERIA	TEMPERATURE	MERCURY	PESTICIDES	NITRATES	METALS	NPDES PHASE II MS4
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.			✓	✓	✓	✓	✓

MARION COUNTY - MANAGEMENT STRATEGIES 2022-2023  
TMDL IMPLEMENTATION MATRIX

MANAGEMENT STRATEGY	ACTION CATEGORY	SWMA ONLY	PRACTICE	HOW	FISCAL ANALYSIS	MEASURE	TIMELINE	MILESTONE	STATUS/ EVALUATION	BACTERIA	TEMPERATURE	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 30,000 have been funded and planted since the program began.	MC partnered with the Pudding River Watershed Council to plant 215 native trees and shrubs along the impaired Bochsler Creek during the 2022-23 year.	✓	✓	✓		✓	✓	✓
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	13.9 tons of waste, 613 illegal dumpings, 428 tires, 229 pieces of furniture, 242 deer carcasses, and 140 dead animals were removed from the right-of-way.	✓	✓	✓	✓	✓	✓	✓
PP&GHCO	Stewardship		Riparian Restoration	Complete riparian restoration project or implement strategy to preserve/improve existing riparian vegetation.	Accounted for in annual budget	# of projects	Completed	N/A	MC Parks intends to complete 360,080 new plantings in the Santiam Canyon Recovery area by 2025. In the north Salem area, 3,750 native plants were planted along the Claggett Creek by internal MC Stormwater Operations staff.	✓	✓	✓	✓	✓	✓	✓
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 Earthwise 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;Completed 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	There are 16 developed parks and four undeveloped parks in MC which are maintained weekly. MC parks have permanent or temporary restroom facilities in place. During busy periods, additional restroom facilities will be added, and frequency of garbage removal will be increased as needed. 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; Stormwater Fees	Annual reporting	Completed; ongoing	N/A	NPDES requirements will be satisfied within the urban area	✓	✓	✓	✓	✓	✓	✓





**DEQ**

State of Oregon  
Department of  
Environmental  
Quality

# Annual Report

## MS4 Phase II General Permit

### National Pollutant Discharge Elimination System

### MS4 Stormwater Discharge Permit

**Monitoring Year:**

**Permit Registrant:**

**Date Prepared/Submitted:**

**DEQ File No.:**

#### Certification and Signature

1. Permit Registrant(s): Marion County
2. Legally Authorized Representative: Brian Nicholas
3. Title: Public Works Director
4. Email: bnicholas@co.marion.or.us
5. Phone: (503) 588-7943

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations (40 CFR 122.22(d)).

Signature

Date

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## Instructions

At least once per year, the permit registrant must evaluate compliance with the requirements of the MS4 Phase II general permit using this Annual Report template. This self-evaluation includes assessment of progress made towards 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).

For each SWMP control measure or activity listed below, please answer all the questions and in the comments field cite any relevant information and/or statistics that helps to illustrate implementation or compliance. If your answer is "No," in the comments field explain the reasons and outline the anticipated implementation timeline. If the requirement does not apply, explain why it is not applicable in the comments field.

No later than November 1 each year, beginning in 2020, the permit registrant must submit an Annual Report to DEQ. One signed copy and one electronic copy must be submitted to DEQ using the address provided in permit. DEQ can provide an FTP site for submittal of the electronic copy, upon request.

## General Information

### Registrant Information

6. Permit Registrant(s):

7. Type(s): ☐ City / ☒ County / ☐ Special District / ☐ Other:

8. Registrant Type:

Existing Registrant: ☒ New Registrant: ☐

9. Community Type:

Large Community: ☐ Small Community: ☒

10. DEQ Permit No: 113608

11. EPA File No: ORS113608

12. Physical Address: 5155 Silverton Rd NE

City: Salem

State: OR

Zip: 97305

13. Point of Contact: Roxanne Toepfer

Title: Environmental Specialist

Email: rtoepfer@co.marion.or.us

Phone: (503) 365-3127

14. Mailing Address (if different):

City:

State:

Zip:

### Municipal Separate Storm Sewer System (MS4) Information

15. Estimate the area in square mileage served by the MS4: 43.6 square miles

16. Estimate the population served by the MS4: 30,000

### MS4 Stormwater Discharge Information

*Identify the names of all known waters that receive a discharge from your MS4.*

Receiving Waterbody	# of Outfalls	Impaired waterbody		Impairment(s)
		303d listed	TMDL issued	
a. Claggett Creek	89	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Dissolved Oxygen- year_round; Dissolved Oxygen- spawn; BioCriteria; E. coli
b. Fitzpatrick Creek	1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
c. Fruitland Creek	5	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
d. Lake Labish Ditch	1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
e. Little Pudding River	78	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	E. coli, Dissolved Oxygen- spawn, Diazion- Aquatic Life Toxics, DDE 4,4'- Human Health Toxics, DDT 4,4'- Human Health Toxics
f. Mill Creek	4	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature, Dissolved Oxygen, & E. coli

### Coordination Among Registrants and Joint Agreements

*Required for permit registrants relying on another entity to satisfy one or more of the requirements of the permit.*

17. Is there a joint agreement in place for the implementation of one or more stormwater management program control measures? *Schedule A.2*    Yes ☐    No ☒
18. If yes, has there been any change to the joint agreement(s) submitted previously?    Yes ☐    No ☐  
If yes, include, as an attachment, a summary of the changes.  
***The summary must identify the other co-registrants/co-implementers or other entities***

### Stormwater Management Program Information

19. Discuss the status and overall progress of establishing legal authority to control pollutant discharges into and discharges from the MS4 and to implement and enforce the conditions of this permit. *Schedule A.2.c*
- Marion County has strong legal authority to respond to pollutant discharges within the Stormwater Management Area. Marion County Code Chapter 15.15 Stormwater Discharge Quality Control prohibits non-stormwater discharges into and from the MS4 and surface water drainage system within the Storm Water Management Area. The code provides capability for escalating enforcement actions to promote compliance.

### Stormwater Management Program Information

20. Is an updated SWMP Document attached? *Schedule A.2.c*  
Yes ☒    No ☐    *(must be submitted with the second Annual Report)*  
If necessary, provide an explanation: N/A
21. Identify the publicly accessible website where the SWMP Document is posted. *Schedule 2.c & A.3.b.ii*  
  
<https://www.co.marion.or.us/PW/ES/waterquality/Pages/strmwtr.aspx>  
  
If necessary, provide an explanation: N/A
22. Does the SWMP Document include an implementation schedule for control measures that have yet to be or are partially implemented? *Schedule A.2.c*  
Yes ☒    No ☐  
If necessary, provide an explanation: N/A
23. Describe the method used to gather, track, and use SWMP information to set priorities or assess compliance: *Schedule A.2.d*  
  
Assigned teams track required tasks and goals through different applications, such as ArcGIS, the Accela Oregon ePermitting website, social media software like Agorapulse, and other data platforms. This information is centrally gathered by program staff for evaluation and reporting purposes.
24. Have adequate finances, staff, equipment, and other support capabilities been provided to implement the permit? *Schedule A.2.e*  
Yes ☒    No ☐  
If necessary, provide an explanation: N/A
25. During this monitoring year was compliance with the requirements of this permit evaluated? *Schedule B.1*  
Yes ☒    No ☐  
If necessary, provide an explanation: N/A

26. During this monitoring year was it determined or reported that discharge from the MS4 caused or contributed to an excursion of an applicable water quality standard? *Schedule A.1.b*

Yes ☐ No ☒

*If "Yes", complete Water Quality Standards section (p. 21) of this template.*

## Stormwater Management Program Control Measures

### Public Education and Outreach

27. Provide a brief summary of the ongoing public education and outreach program. *Schedule A.3.a*

Marion County employs one dedicated full-time Communications Coordinator whose chief purpose is to fulfill outreach needs of the County, including those specific requirements in this control measure. Marion County's robust water quality outreach program includes a mixture of in-person outreach events, interactive digital events, digital publications, and social media messaging. Outreach topics include different monthly themes and several events/trainings throughout the year. The County actively engages with residents through digital platforms such as the local county webpage, Facebook, Instagram, Twitter, and YouTube and has been using software programs to capture social media metrics (ex: reach/shares/reaction quantity and timeframes). Digital content, events, and trainings aim to educate target audiences and highlight topics about such things as illicit discharge/connection reporting, erosion/sediment prevention and containment, recycling/materials management, pet waste, lawn care, onsite septic practices, and volunteer opportunities. Some of these events include the Water Festival, Earth Day, Fall Festival, BMP Field Training (internal/external/interagency), and the Erosion Control and Stormwater Management Summit.

The County partners with groups that create educational water quality materials for distribution (ex: Clean Rivers Coalition, the Mid-Willamette Outreach Group, and the Clean Water Partnership). Participation with groups like the Association of Clean Water Agencies, Council of Water Leaders, the Partners of the North Santiam help to keep the County abreast of emergent topics, innovative technologies, and shared data sets.

28. Were the required components in place by the implementation date? *Schedule A.3.a.i*

Yes ☒ No ☐ *(Implementation date: Feb. 28, 2020 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)*

29. Provide the number of education and outreach activities conducted: *Schedule A.3.a.iii*

During this reporting year: 135 (9 in-person; 126 digital)

30. During the permit term: 189

If necessary, provide an explanation: N/A

31. Indicate target audiences addressed during this reporting year: *Schedule A.3.a.iv*

- ☒ General public, homeowners, homeowner association, schoolchildren, and businesses
- ☒ Local elected officials, land use planners and engineers
- ☒ Construction site operators

32. Have each target audience been addressed during the permit term? *Schedule A.3.a.iv*

Yes ☒ No ☐

33. Indicate target topics addressed during this reporting year: *Schedule A.3.a.iv*

- ☒ Impacts of illicit discharges on receiving waters and how to report them
- ☒ Impacts from impervious surfaces and appropriate techniques to avoid adverse impacts
- ☒ BMPs for proper use, application and storage of pesticides and fertilizer
- ☒ BMPs for litter and trash control
- ☒ BMPs for recycling programs
- ☒ BMPs for power washing, carpet cleaning and auto repair and maintenance
- ☒ Low impact development/green infrastructure
- ☒ Information pertaining to maintenance of septic systems
- ☒ Watershed awareness and how storm drains lead to local creeks and rivers, and potential impacts to fish and other wildlife
- ☒ Other: Erosion and sediment control.

34. Describe the types of educational messages or activities distributed and/or offered during this reporting year.  
*Schedule A.3.a.iii*

Community events provided engaging educational opportunities. Social media messaging was produced for a variety of target topics. On Facebook, YouTube, and Instagram, 126 posts relating to the target topics were published with posts being seen a total of 280,212 times during the permit year. Marion County also worked in conjunction with DEQ and other partner agencies to produce the DEQ Disaster Planning and Response Handbook for Onsite Septic Systems.

Messaging and activities:

- Safe lawn care hints and tips
- Fall leaf haul information
- Appropriate use and storage of pesticides and fertilizer
- Pet waste disposal
- Street-to-river storm drain connectivity and conveyance; dangers of litter in our waterways to fish and other wildlife
- Stormwater Quality Treatment Engineering Standard updates (engineering community)
- Updated Land Development & Engineering Permit form distribution
- Hosted BMP trainings
- Septic System maintenance information distributed with completed permits
- Signs of water pollution and how to report it in Marion County
- Recycling rules in Marion County; preventing recycling contamination in Marion County
- Reducing waste as a key part of Marion County's recycling program
- BMPs for power washing, carpet cleaning, and auto maintenance
- Green infrastructure maintenance (rain gardens, etc.; private and County maintained)
- Volunteer opportunities (litter cleanups, Marion Water Quality Advisory Committee, storm drain marking).
- Multi-agency coordinated outreach events.

Means of distribution:

- Social media posts, YouTube shorts
- Educational advertisements/web resources
- Digital flyers, email distribution lists, and agency noticing
- In person outreach activities (schools, trainings, fairs)
- Interactive digital activity trackers and surveys
- Demonstrations at community events
- FOX 12 KPTV News segments and website
- DEQ Handbook

35. Was outreach to construction site operators working within your community offered during this reporting year? *Schedule A.3.a.v*

Yes ☒ No ☐

36. Total number during the permit term: 4

37. Identify and describe the assessment/evaluation of, at least, one education and outreach activity that occurred during this reporting year. Include the assessment process or metric for evaluation, and why this activity was considered successful. *Schedule A.3.a.vi*

The Origins of Earth Day event on April 22, 2023, exceeded the goals of Marion County Environmental Services with 400 attendees. The event provided engaging, equitable, exciting, and educational opportunities and hands-on activities for the community with the intent to promote the Environmental Services program goals.

An additional 373 activities were completed in the Passport to Sustainability pre-event which consisted of a digital activity tracker where participants were encouraged to complete various educational water quality and waste reduction activities to earn points. Each activity had educational materials embedded within the questions and allowed for participants to learn while practicing behaviors to improve water quality. The event overall had numerous family-friendly activities to teach the community about protecting the environment.

Local agencies and partners participated in tabling individual booth and an educational scavenger hunt taught participants about watersheds, local recycling and garbage disposal information, native plants, stormwater, the dangers of erosion, climate action planning, gardening, food preservation, food waste reduction, and local volunteer opportunities. 154 families completed the educational scavenger hunt, in comparison to the 35 completed in 2022.

38. Will the assessment be used to inform future stormwater education and outreach efforts? *Schedule A.3.a.vi*

Yes ☒ No ☐

39. Provide an explanation:

The use of ArcGIS survey mechanisms assisted in capturing data to compare with previous data sets so that content could be curated to best conduct outreach, based on the results of the distributed surveys. Content platforms were adjusted based on where the outreach would be most beneficial to meet community needs or distribute relevant environmental messaging. The County also utilized Agorapulse program software to calculate metrics and areas of strengths and weakness. This practice will continue in the coming year.

Intended Goals or Outcomes of Earth Day:

1. Promote community engagement and buy in with protecting our environment, emphasize unity and remove divisions in environmental stewardship.
2. Organize an event for the public that is educational and engaging. Ensure the barrier to entry is low with free or inexpensive activities and promotional goods.
3. Attract a large and diverse audience within Marion County.
4. Provide community education and activities to meet necessary environmental regulations and promote waste reduction, water quality, and outdoor experiences.
5. Collect information and insight from attendees to better understand the needs of Marion County residents.
6. Emphasize event planning and execution with minimal waste to provide a use-case to the community about how to reduce waste in a variety of ways.

## Public Involvement and Participation

40. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.b*

The County has a publicly accessible website that undergoes periodic review and updates where water quality program contact information is immediately available. In addition, the Marion County website also hosts a reporting form for illicit discharges and connections with additional information pertaining to the topic. The County's Stormwater Management Plan, ordinances, annual reporting, and relevant stormwater documentation are available on the website as well.

For volunteer opportunities, the Operations Division facilitates the Adopt-a-Road litter clean-up program. Volunteers also participate in August's Water Quality Month litter clean-ups, hosted by the County. For internal trash collection, residents can report illegal dumping to the County through walk-in, phone, or email contact.

The Environmental Services Division loans stenciling kits to businesses, neighboring agencies, and individuals for marking inlets on private lots. Volunteers are also encouraged to participate in the application and tracking of storm drain curb marking in the public right-of-way. Curb markers and stencils are applied to serve as a reminder to prevent non-stormwater wastes from entering the storm drain. The County is looking to further develop an Adopt-a-Catch Basin and Adopt-a-Water Quality Facility program to similarly mimic the Adopt-a-Road program and to provide the public with "ownership" opportunities. The creation of and updates to programming will be shared with DEQ through reporting as/if programs are developed.

The Marion Resources program is a Marion County materials management program with a similar framework as the Master Recycler program, but under the direction of Marion County. The course is offered multiple times a year and includes a required Water Quality learning component. This component will typically reference current water quality regulations, Marion County's efforts, water quality life-cycle analyses of various products or materials, and steps that citizens can take to improve water quality.

Marion County hosts the Marion Water Quality Advisory Committee. The Marion Water Quality Advisory Committee was created to provide direction to Marion County staff and to make recommendations regarding stormwater, water quality, educational outreach, regulations, and county programs. Marion County also partners with other jurisdictions and agencies to provide opportunities for public involvement. The County will continue to seek opportunities to engage the public to improve water quality.

41. Were the required components in place by the implementation date? *Schedule A.3.b.i*

Yes ☒ No ☐ (Implementation date: Feb. 28, 2020 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)

42. Is the SWMP Document posted on a publicly accessible website? *Schedule A.3.b.ii*

Yes ☒ No ☐

43. Was the publicly accessible website updated during this reporting year? *Schedule A.3.b.ii*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

44. Does the publicly accessible website include illicit discharge complaint/reporting information or procedures? *Schedule A.3.b.ii.A*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

45. Does the publicly accessible website include draft documents issued for public comment, final reports, plans and other official SWMP policy documents? *Schedule A.3.b.ii.B*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

46. Does the publicly accessible website include 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? *Schedule A.3.b.ii.C*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

47. Does the publicly accessible website include contact information for relevant staff, including phone numbers, mailing addresses and email addresses? *Schedule A.3.b.ii.D*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

48. During this reporting year, was a stewardship opportunity created or partnered with another entity? *Schedule A.3.b.iii*

Yes ☒ No ☐

If "Yes", summarize the stewardship opportunity(s).

- Litter cleanups
- Adopt-a-Road
- Master Recycler Program (Marion Resources)
- Curb Marker Application
- Inlet Stenciling Kits

### Illicit Discharge Detection and Elimination

49. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.c*

As internal and external complaints are received (via phone, walk-in, and/or email), information is routed to the appropriate party and investigators are assigned for site evaluation. The first deployed action is containment, then the incident area is cleaned and remediated as soon as practicable. Cleanup will involve Marion County crews, if within scope; otherwise, a contractor is deployed (typically through US Ecology). Based on magnitude of discharge or dumping, OERS will receive notification.

If the discharge is continuing and/or caused by a private party, the party is notified through the appropriate communication channel. If compliance is not met through education, the enforcement process will begin based on established escalation procedures, backed by county codes.

Marion County utilizes ArcGIS Field Maps and Survey123 to retain IDDE reporting information. The mapping applications contain asset information for the County stormwater conveyance system where each stormwater asset is assigned a unique identifier. From this, a customized maintenance tracking system and a dry weather screening program is utilized, based on operational and reporting needs. The information retained can be edited by administrative or operational staff to add or edit existing IDDE records to update as necessary.

50. Were the required components in place by the implementation date? *Schedule A.3.c.i*

Yes ☒ No ☐ (*Implementation date: Feb. 28, 2022 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner*)

51. Is the MS4 map(s) current? *Schedule A.3.c.ii.A*

Yes ☒ No ☐

52. Describe the MS4 map(s) format(s): PDF, shapefile, ArcGIS, etc.

53. Is the MS4 map(s) included as attachment? Yes ☒ No ☐

Or are the digital shapefiles available for electronic submittal? Yes ☒ No ☐

(Implementation date: Feb. 28, 2022 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)

If necessary, provide an explanation: Marion County can provide access to the mapping system upon request.

54. Is the digital inventory of all known outfalls, with the associated receiving waterbody current? *Schedule A.3.c.ii.B*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

55. Indicate if the following features are included on your MS4 map:

- ☒ Location of all known outfalls, including the requirements in *Schedule A.3.c.ii.B*
- ☒ Stormwater collection and conveyance system, including the requirements in *Schedule A.3.c.ii.C*
- ☒ Stormwater structural controls, including the requirements in *Schedule A.3.c.ii.C*
- ☒ Location of known chronic discharges *Schedule A.3.c.ii.D*

If necessary, provide an explanation: A mechanism exists to capture the location of known chronic discharges; however, none such instances currently exist. Marion County can provide access to the mapping system upon request (outfalls, collection/conveyance system, and controls).

56. Have non-stormwater discharges into the MS4 been prohibited through enforcement of an ordinance or other regulatory mechanism? *Schedule A.3.c.iii*

Yes ☒ No ☐

If necessary, provide an explanation: Marion County Chapter 15.15 Stormwater Discharge Quality Control

57. Indicate which of the following have an ordinance or other regulatory mechanism to prohibit discharge to the MS4: *Schedule A.3.c.iii*

- ☒ Septic, sewage, and dumping or disposal of liquids or materials other than stormwater into the MS4
- ☒ Discharges of washwater resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities
- ☒ 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.
- ☒ Discharges of washwater from mobile operations, such as mobile automobile or truck washing, steam cleaning, power washing, and carpet cleaning, etc.
- ☒ 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)
- ☒ Discharges of runoff from material storage areas, which contain chemicals, fuels, grease, oil, or other hazardous materials from material storage areas
- ☒ Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water
- ☒ Discharges of sediment, unhardened concrete, pet waste, vegetation clippings, or other landscape or construction-related wastes
- ☒ Discharges of trash, paints, stains, resins, or other household hazardous wastes
- ☒ Discharges of food-related wastes (grease, restaurant kitchen mat and trash bin washwater, etc.)

If necessary, provide an explanation: N/A

<p>58. Is the written escalating enforcement and response procedure included as an attachment? <i>Schedule A.3.c.iv</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>(For Existing Registrant must be submitted with the third Annual Report, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)</i></p> <p>If necessary, provide an explanation: N/A</p>
<p>59. Is there a phone number, webpage, and/or other communication channel publicized for the public use to report illicit discharges? <i>Schedule A.3.c.v.A</i></p> <p><input checked="" type="checkbox"/> Phone number(s)</p> <p><input checked="" type="checkbox"/> Webpage(s)</p> <p><input type="checkbox"/> Other communication channels</p> <p>If necessary, provide an explanation: N/A</p>
<p>60. Provide the number of complaints received during this reporting year. <i>Schedule A.3.c.v.D</i></p> <p>Number: 12 <i>(complaints related to IDDE)</i></p>
<p>61. On average, how long did it take to respond to complaints? <i>Schedule A.3.c.v.B</i></p> <p>In working days: Within one working day</p>
<p>62. Provide the number of complaints that included notification of the Oregon Emergency Response System during this reporting year. <i>Schedule A.3.c.v.B</i></p> <p>Number of notifications: 2</p>
<p>63. Provide the number of complaints where staff performed an investigation during this reporting year. <i>Schedule A.3.c.v</i></p> <p>Number: 12 <i>(investigations related to IDDE)</i></p>
<p>64. On average, how long did it take to conduct an initial investigation? <i>Schedule A.3.c.v.B</i></p> <p>In working days: Within one working day</p>
<p>65. Provide the number of illicit discharges discovered and eliminated during this reporting year. <i>Schedule A.3.c.v</i></p> <p>Number: 12</p>
<p>66. On average, how long did it take to eliminate an illicit discharge? <i>Schedule A.3.c.v.B</i></p> <p>In working days: Within one working day</p>
<p>67. Provide the number times escalating enforcement procedure was used to eliminate illicit discharge during this reporting year. <i>Schedule A.3.c.v.D</i></p> <p>Number of times: 7</p>
<p>Do any of the illicit discharges involve the repair or replacement of the wastewater and/or storm sewer conveyance systems? <i>Schedule A.3.c.v.B</i></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/></p> <p>If necessary, provide an explanation: N/A</p>
<p>68. Provide the number of illicit discharges that were referred to another entity during this reporting year. <i>Schedule A.3.c.v.C</i></p> <p>Number: 0</p>
<p>69. On average, how long did it take to notify the entity(s)?</p> <p>In working days: N/A</p> <p>if necessary, provide an explanation: N/A</p>

70. Indicate which of the following are included in the complaints or reports tracking documentation: *Schedule A.3.c.v.D*

- ☒ Date the complaint was received and, if available, the complainant's name and contact information
- ☒ Name of staff responding to the complaint
- ☒ Date the investigation was initiated
- ☒ The outcome of the staff investigation
- ☒ Corrective action(s) taken to eliminate the illicit discharge
- ☒ The responsible party for the corrective action(s)
- ☒ The status of enforcement procedure(s), when necessary
- ☒ The date the corrective action(s) was completed and staff who evaluated final compliance

If necessary, provide an explanation: N/A

71. Provide percentage of outfalls inspected. *Schedule A.3.c.vi.A/B*

Known outfalls screened this reporting year: 20.33%

72. Known outfalls screened during the permit term: 100%

If necessary, provide an explanation: N/A

73. Provide percentage of outfalls inspected as part of field screening of priority location. *Schedule A.3.c.vi.C*

Priority location outfalls screened this reporting year: 20.33%

74. Priority location outfalls screened during the permit term: 100%

If necessary, provide an explanation: N/A

75. Indicate which of the following dry-weather field screening activities have been performed in the last year: *Schedule A.3.c.vi*

- ☒ General observation
- ☒ Field Screening and Analysis
- ☐ Pollutant Parameter Action Levels
- ☐ Laboratory Analysis

If necessary, provide an explanation: Field investigations revealed flow source identities without the need for lab testing.

76. If flow is observed and the source is unknown, provide a brief description of the field investigation and analysis process. *Schedule A.3.c.vi.D-G*

Observations will be made and documented at the outfall. Operators will then attempt to follow the flow upstream, looking in ditches, manholes, etc. as necessary to find a point as close to the origin as possible. A point closest to the source will be documented with any relevant observations and marked in GIS. If the source cannot be identified in this way, the flow will be screened in the field for pH, temperature, specific conductance, and dissolved oxygen. If action levels are exceeded, samples will be taken and analyzed at a laboratory to characterize and attempt to identify the source of the flow. These analyses will be determined on a case-by-case basis in collaboration with the laboratory and any other outside counsel that may be able to sharpen the focus of the investigation.

77. Have pollutant parameter action levels been established and are they included as an attachment? *Schedule A.3.c.vi.F*

Yes ☒ No ☐

(For Existing Registrant must be submitted with the third Annual Report. New Registrants must submit by September 1, 2023 and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)

If necessary, provide an explanation: N/A

78. Are all persons responsible for investigating and eliminating illicit discharges and illicit connections into the MS4 appropriately trained to conduct such activities? *Schedule A.3.c.vii*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

79. Are all new staff working to implement the IDDE program trained within 30 days of their assignment to this program? *Schedule A.3.c.vii*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

### Construction Site Runoff Control

80. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.d*

To satisfy the requirements of this control measure, Marion County has implemented the NPDES MS4 Construction Site Runoff Control program, administered through the Land Development Engineering and Permits division; it is as follows:

1. Intake (ESCP required at ¼ acre/10,890 ft<sup>2</sup> or more of ground disturbing activities up to < 5 acres)
2. Plan review (checklist) and approval
3. Permit issuance (automatic coverage under 1200-CN if activities disturb 1 acre or more)
4. Inspection (per permit schedule/visible or reported sediment/complaint, etc.)
5. Final permit closeout

81. Were the required components in place by the implementation date? *Schedule A.3.d.i*

Yes ☒ No ☐ (Implementation date: Feb. 28, 2023 for Existing Registrants, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)

82. Do ordinances or other regulatory mechanisms require erosion controls, sediment controls, and waste materials management controls to be used and maintained at all qualifying construction projects? *Schedule A.3.d.ii*

Yes ☒ No ☐ NA ☐

If necessary, provide an explanation: N/A

83. Indicate the minimum land disturbance where construction site operators are required to complete and implement an Erosion and Sediment Control Plan (ESCP) for construction project sites: *Schedule A.3.d.ii*

In square feet or portion of an acre: 10,890 ft<sup>2</sup> ☒, acres ☐

If necessary, provide an explanation: N/A

84. 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), provide a brief description how these projects are referred to DEQ or the appropriate DEQ agent, to obtain a NPDES Construction Stormwater General Permit. *Schedule A.3.d.iii*

If construction activities disturb 1 acre or more, project automatically receives coverage under DEQ 1200-CN in addition to County EPSC permit if located within the SWMA. Information is supplied in application packet and hosted on Marion County Public Works webpage.

85. Provide the written specifications that address the proper installation and maintenance of such controls during all phases of construction activity as an attachment *Schedule A.3.d.iv*

Attached: Yes ☒ No ☐

If necessary, provide an explanation: N/A

86. Provide the Erosion and Sediment Control Plan template as an attachment. *Schedule A.3.d.iv.A*

Attached: Yes ☒ No ☐

If necessary, provide an explanation: N/A

87. Indicate which of the following are required for qualifying construction projects: *Schedule A.3.d.iv*

- ☒ Site operator required to complete a ESCP template or worksheet prior to beginning construction/land disturbance
- ☒ Site operator required to keep the ESCP on site
- ☒ Site operator required to maintain and update the ESCP as site conditions change, or as needed.
- ☒ Site operator required to provide the ESCP to the permit registrant, DEQ, or another administrating entity

If necessary, provide an explanation: N/A

88. 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)] are reviewed using a checklist or similar document to determine compliance. *Schedule A.3.d.v*

Yes ☒ No ☐

89. Provide the ESCP review template or checklist as an attachment. *Schedule A.3.d.v*

Attached: Yes ☒ No ☐

90. Indicate the minimum land disturbance where you require the ESCP to be reviewed, if different than one acre:

10,890 ft<sup>2</sup> ☒, acres ☐

If necessary, provide an explanation: N/A

91. All 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)] are expected or scheduled to be inspected at least once per permit term. *Schedule A.3.d.vi.A.1*

Indicate the number of inspections completed to comply with this requirement during this reporting year: 25

Indicate the number of inspections completed to comply with this requirement during the permit term: 89

If necessary, provide an explanation: N/A

92. Are construction projects with visible sediment in stormwater/dewatering discharge or when a complaint is received inspected? *Schedule A.3.d.vi.A.2*

Yes ☒ No ☐

93. Indicate number of projects that were inspected based on this inspection trigger: 0

If necessary, provide an explanation: N/A

94. Indicate the total number of construction projects that were inspected this monitoring year: 15

95. Indicate the total number of construction projects that were inspected during the permit term: 52

96. Indicate which of the following are documented during an inspection: *Schedule A.3.d.vi.B*

- ☒ That the ESCP is reviewed to determine if the described
- ☒ Control measures were installed, implemented, and maintained appropriately
- ☒ Assessment of the site's compliance with the ordinances or requirements
- ☒ Visual observation of any existing or potential non-stormwater discharges, illicit connections, and/or discharge of pollutants from the site
- ☒ Recommendations to the construction site operator for follow-up
- ☒ Education or instruction provided to the site operator related to stormwater pollution prevention practices

If necessary, provide an explanation: N/A

97. If available, provide a copy of the written or electronic inspection report form. *Schedule A.3.d.vi.B*

Attached: Yes ☒ No ☐

98. For Existing Large Communities: Indicate the number of new construction projects inspected that disturb less one acre during this monitoring year. Is this number at least 25% of the qualifying new construction sites? *Schedule A.3.d.vi.C*

N/A

If necessary, provide an explanation: Marion County is designated a Small Community.

99. Provide the written escalating enforcement and response procedure as an attachment. *Schedule A.3.d.vii*

Yes ☒ No ☐

*(For Existing Registrant must be submitted with the third Annual Report. Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)*

If necessary, provide an explanation: N/A

100. Was the escalating enforcement procedure used to achieve compliance at any construction projects? *Schedule A.3.d.vii*

Yes ☐ No ☒

Indicate number of times during this reporting year: 0

101. Indicate number of times during the permit term: 1

If necessary, provide an explanation: N/A

102. Were all persons responsible for ESCP reviews, site inspections, and enforcement appropriately trained to conduct such activities? *Schedule A.3.d.viii*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

103. Were all new staff working to implement the construction site runoff control program appropriately trained within 30 days of their assignment to this program? *Schedule A.3.d.viii*

Yes ☒ No ☐

### Post-Construction Site Runoff for New Development and Redevelopment

104. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.e*

The County has developed and implemented a new set of Engineering Standards to satisfy regulatory stormwater requirements and accompany the enforcement procedures written in Marion County Code (MCC) Sections 1.25: Enforcement, 15.10: Construction Erosion and Sediment Control, 15.15: Stormwater Discharge Quality Control and 15.20: Post Construction Runoff Control.

Post-construction stormwater management is required for new development and redevelopment within the SWMA if the project site discharges stormwater to the MS4 and creates or replaces 10,890 square feet or more of impervious area(s). These Standards specifically address the water quality treatment component of stormwater management, development stormwater related submittal requirements, erosion prevention and sediment control, and operation and maintenance.

105. Were the required components in place by the implementation date? *Schedule A.3.e.i*

Yes ☒ No ☐ *((Implementation date: Feb. 28, 2023 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)*

<p>106. For projects creating or replacing impervious area, indicate the area (or threshold) where the site is required to implement the post-construction site runoff program requirements: <i>Schedule A.3.e.ii</i> In square feet: 10,890 ft<sup>2</sup></p> <p>If necessary, provide an explanation: N/A</p>
<p>107. Indicate which of the following are required at qualifying sites: <i>Schedule A.3.e.ii</i></p> <p><input checked="" type="checkbox"/> The use of structural stormwater controls</p> <p><input checked="" type="checkbox"/> A site-specific stormwater management approach that targets natural surface or predevelopment hydrological function through the installation and long-term operation and maintenance of stormwater controls</p> <p><input checked="" type="checkbox"/> Long-term O&amp;M of stormwater controls at project sites that are under the ownership of a private entity</p> <p>If necessary, provide an explanation: N/A</p>
<p>108. Were ordinance(s), code(s) and development standards reviewed to identify, minimize or eliminate barriers that inhibit design and implementation techniques intended to minimize impervious surfaces and reduce stormwater runoff? <i>Schedule A.3.e.iii</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If barriers were identified or if necessary, provide an explanation: N/A</p>
<p>109. Provide an explanation of the timeline for removal of barriers or if removal is outside your authority:</p> <p>N/A</p>
<p>110. Indicate which of the following technical standards are used to determine the retention requirement: <i>Schedule A.3.e.iv.A</i></p> <p><input checked="" type="checkbox"/> Volume-based method</p> <p><input type="checkbox"/> Storm event percentile-based method</p> <p><input type="checkbox"/> Annual average runoff-based method</p> <p>If necessary, provide an explanation: N/A</p>
<p>111. For projects that are unable to meet the retention requirement, is the remainder of the rainfall/runoff treated prior to discharge with a structural stormwater control? <i>Schedule A.3.e.iv.B</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>112. Was the stormwater structural control designed to remove, at minimum, 80 percent of the total suspended solids?</p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: N/A</p>
<p>113. Are the allowable structural stormwater controls and specifications available for review? <i>Schedule A.3.e.iv.C</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>114. Indicate if they are attached or the location where they can be viewed:</p> <p>Attached <input type="checkbox"/></p> <p>Location: <a href="https://www.co.marion.or.us/PW/Engineering/engineeringstandards/Documents/MCPW%20Stormwater%20Quality%20Treatment%20Engineering%20Standards%20-%202022.pdf">https://www.co.marion.or.us/PW/Engineering/engineeringstandards/Documents/MCPW%20Stormwater%20Quality%20Treatment%20Engineering%20Standards%20-%202022.pdf</a></p> <p>If necessary, provide an explanation: N/A</p>
<p>115. Have alternatives for projects complying with the retention requirement been approved? <i>Schedule A.3.e.iv.D</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

116. If yes, are the written technical justifications evaluated? *Schedule A.3.e.iv.D*

Yes ☒ No ☐

117. Provide a brief description of the factors of technical infeasibility or site constraints that prevented the on-site management of the runoff amount stipulated in the stormwater retention requirement or a portion thereof. *Schedule A.3.e.iv.D*

Developers/applicants must demonstrate that retention (i.e., infiltration) is infeasible and must provide documentation in a required Stormwater Management Report that one of the below conditions exist:

- Low infiltration rates
- Siting on fill
- Steep slopes
- High groundwater
- Contaminated soils

Section 3.4 in Stormwater Treatment Engineering Standards:

<https://www.co.marion.or.us/PW/Engineering/engineeringstandards/Documents/MCPW%20Stormwater%20Quality%20Treatment%20Engineering%20Standards%20-%202022.pdf>

If necessary, provide an explanation: N/A

118. Before the allowance of alternative compliance, were mitigation options established? *Schedule A.3.e.iv.D*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

119. If applicable, indicate which of the following mitigation options have been used and provide a narrative description of the implementation of the mitigation option? *Schedule A.3.e.iv.D*

- ☒ Off-Site Mitigation  
☐ Off-Site Groundwater Replenishment Projects

If necessary, provide an explanation: N/A

120. Was a procedure developed for the review and approval of structural stormwater control plans for new development and redevelopment projects? *Schedule A.3.e.v*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

121. Indicate the minimum land disturbance or creation of new impervious area where plans are required to be reviewed: 10,890 ft<sup>2</sup> ☒, acres ☐ of land disturbance ☐ creation of new impervious area ☒

122. Are all sites that use alternative compliance to meet the retention requirement reviewed?

Yes ☒ No ☐

If necessary, provide an explanation: N/A

123. Indicate if an inventory and implementation strategy is used to ensure that all stormwater controls are operated and maintained to meet the site performance standard in Schedule A.3.e.iv of the permit? *Schedule A.3.e.vi*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

124. Indicate which of the following strategies have been developed to ensure that all stormwater controls are operated and maintained to meet the site performance standard in Schedule A.3.e.iv. *Schedule A.3.e.vi*

- ☒ Legal authority to inspect and require effective operation and maintenance of privately owned and operated stormwater controls
- ☒ Inspection procedures and an inspection schedule to ensure compliance with the O&M requirements of each stormwater control operated by the permit registrant and by other private entities
- ☒ A tracking mechanism for documenting inspections and the O&M requirements for each stormwater control
- ☒ Reporting requirements for privately owned and operated stormwater controls that document compliance with the O&M requirement in Schedule A.3.f.

If necessary, provide an explanation: N/A

125. Are the location of all public and private stormwater controls installed during this permit term documented on the MS4 Map? *Schedule A.3.e.vi*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

126. Were all persons responsible for performing post-construction runoff site plan reviews, administering the alternative compliance program, or performing O&M practices or evaluating compliance with long-term O&M requirements appropriately trained to conduct such activities? *Schedule A.3.e.vii*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

127. Were all new staff working to implement the post-construction site runoff for new development and redevelopment program appropriately trained within 30 days of their assignment to this program? *Schedule A.3.e.vii*

Yes ☒ No ☐

If necessary, provide an explanation: N/A

### **Pollution Prevention and Good Housekeeping for Municipal Operations**

128. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.f*

Staff created and launched a computerized Best Management Practices for Clean Water training available to all Public Works staff, mandatory for anybody in a operations or maintenance position. This training covers water regulations, defines stormwater and pollutants, discusses beneficial uses for clean water, goes over best management practices for field/shop work, and a large portion devoted to erosion and sediment control. The training is hosted on the County's learning management system and has each staff member scheduled to take the course within 30 days of hire (usually done in the first two days during new employee onboarding) and then again once every five years.

Marion County now hosts an annual/biannual BMP field training for internal staff and external participants. The class expands on BMPs for erosion and sediment control as well as how to properly contain spills. A consultant has been hired to help identify standards for erosion control, which will be included in this training and furthermore used as a baseline for all operations and maintenance.

<p>129. Were the required components in place by the implementation date? <i>Schedule A.3.f.i</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (<i>Implementation date: Feb. 28, 2022 for Existing Registrants, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner</i>)</p>
<p>130. Were O&amp;M strategies for existing controls developed for both permit registrant-owned controls and controls owned and operated by another entity discharging to the MS4? <i>Schedule A.3.f.ii</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/></p> <p>If necessary, provide an explanation: N/A</p>
<p>131. Indicate the percentage of catch basins inspected/cleaned: <i>Schedule A.3.f.iii</i></p> <p>Percentage inspected this reporting year: 36%; Percentage cleaned: 36%</p> <p>132. If known, estimate of material removed: N/A units</p> <p>133. Percentage inspected during the permit term: 104%; Percentage cleaned: 104%</p> <p>134. If known, estimate of material removed: N/A units</p> <p>If necessary, provide an explanation: A total of 3,634 units were inspected and cleaned out of a total of 3,508 catch basins during this permit term.</p>
<p>135. Indicate if a catch basin inspection prioritization system and/or an alternate inspection frequency has been established. <i>Schedule A.3.f.iii</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: Each permit year, operations staff routinely inspect, maintain, and clean catch basins and document pipe conditions. Prioritization is applied to the list of catch basins or other controls by targeting neighborhoods, trees, and age of system, with higher prioritization given to complaint-driven needs.</p>
<p>136. During the permit term were existing procedures for inspection and maintenance schedules reviewed/updated to ensure pollution prevention and good housekeeping practices were conducted for the following activities? <i>Schedule A.3.f.iv</i></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Pipe cleaning for stormwater and wastewater conveyance systems</li> <li><input checked="" type="checkbox"/> Cleaning of culverts conveying stormwater in roadside ditches</li> <li><input checked="" type="checkbox"/> Ditch maintenance</li> <li><input checked="" type="checkbox"/> Road and bridge maintenance</li> <li><input checked="" type="checkbox"/> Road repair and resurfacing including pavement grinding</li> <li><input checked="" type="checkbox"/> Dust control for roads and municipal construction sites</li> <li><input checked="" type="checkbox"/> Winter road maintenance, including salt or de-icing storage areas</li> <li><input checked="" type="checkbox"/> Fleet maintenance and vehicle washing</li> <li><input type="checkbox"/> Building and sidewalk maintenance including washing</li> <li><input checked="" type="checkbox"/> Solid waste transfer and disposal areas</li> <li><input type="checkbox"/> Municipal landscape maintenance</li> <li><input checked="" type="checkbox"/> Material storage and transfer areas, including fertilizer and pesticide, hazardous materials, used oil storage, and fuel</li> <li><input type="checkbox"/> Firefighting training activities</li> <li><input checked="" type="checkbox"/> Maintenance of municipal facilities including public parks and open space, golf courses, airports, parking lots, swimming pools, marinas, etc.</li> </ul> <p>If necessary, provide an explanation: N/A</p>
<p>137. Do any permit registrant-owned facilities have coverage under DEQ's 1200-Z Industrial Stormwater Discharge Permit? <i>Schedule A.3.f.v</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/></p> <p>If "Yes", provide DEQ File Number(s): 103964 (Not within SWMA)</p>

<p>If necessary, provide an explanation: N/A</p>
<p>138. Are practices in place to reduce the discharge of pollutants to the MS4 associated with the application and storage of pesticides and fertilizers? <i>Schedule A.3.f.vi</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: N/A</p>
<p>139. Are methods/practices in place to reduce the discharge of litter within the jurisdiction? <i>Schedule A.3.f.vii</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: N/A</p>
<p>140. Are practices in place to ensure that collected material or pollutants removed in the course of maintenance are managed and disposed of in a manner such as to prevent such pollutants from entering the waters of the state in accordance with state and federal rules? <i>Schedule A.3.f.viii</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: N/A</p>
<p>141. Were all persons responsible for evaluating O&amp;M practices, evaluating compliance with long-term O&amp;M requirements or ensuring pollution prevention at facilities and during operations appropriately trained to conduct such activities? <i>Schedule A.3.f.ix</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: N/A</p>
<p>142. Were all new staff working to implement the pollution prevention and good housekeeping for municipal operations program appropriately trained within 30 days of their assignment to this program? <i>Schedule A.3.f.ix</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: N/A</p>
<p><b>Monitoring</b></p> <p><i>If the requirement does not apply, mark "NA" and explain why it does not apply to you in the comments field.</i></p>
<p>143. Was municipal stormwater monitoring performed at outfall locations, in the receiving waterbody, or to demonstrate compliance with this permit? <i>Schedule B.3</i></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
<p>144. If "Yes" is the data included in the Annual Report?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: Not applicable; monitoring not performed.</p>
<p><b>Wood Village Monitoring Requirements</b></p>
<p>145. Provide a summary of the following to evaluate the control strategies established for the Lower Columbia Slough Phosphate, Lead, and Bacteria TMDLs: <i>Schedule D.1.b</i></p> <p>Phosphate:</p> <p>Lead:</p> <p>Bacteria:</p>

146. Indicate which of the following were completed:

- ☐ 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)
- ☐ For lead, estimates of the effectiveness of controls to remove TSS
- ☐ For bacteria, measuring E. coli concentrations and its distribution over flows (for example, flow duration intervals) to demonstrate compliance with E. coli criteria

If necessary, provide an explanation: N/A

## Water Quality Standards

147. During this monitoring year was it determined or reported that the MS4 discharge caused or contributed to an exceedance of an applicable water quality standard? *Schedule A.1.b*

Yes ☐ No ☒

If necessary, provide an explanation: N/A

148. How and when did the exceedance of an applicable water quality standard occur? *Schedule A.1.b*

If necessary, provide an explanation: N/A

149. Was the exceedance self-reported or did DEQ send written notification? *Schedule A.1.b*

Self-reported: Yes ☐ No ☐

If necessary, provide an explanation: N/A

150. Within 48 hours was an investigation started into the cause of the water quality exceedance? *Schedule A.1.b.i*

Yes ☐ No ☐

If necessary, provide an explanation: N/A

151. Within 30 days of becoming aware of the exceedance, was DEQ notified in writing, if self-reporting? *Schedule A.1.b.ii*

Yes ☐ No ☐

If necessary, provide an explanation: N/A

152. Within 60 days of becoming aware of or being notified of the exceedance, was a report submitted to DEQ that documents the following: *Schedule A.1.b.iii*

- ☐ The results of the investigation, including the date the exceedance was discovered
- ☐ A brief description of the conditions that triggered the exceedance or the cause
- ☐ Corrective actions taken or planned, including the date corrective action was completed or is expected to be completed

If necessary, provide an explanation: N/A

153. Were the corrective actions implemented in accordance with the schedule approved by DEQ? *Schedule A.1.b*

Yes ☐ No ☐

If necessary, provide an explanation: N/A

154. Provide any additional comments or narrative description, if necessary: N/A

# MARION COUNTY STORMWATER MANAGEMENT PLAN 2019-2024



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

(503) 588-5036

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## 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 utilized 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 inspect 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.

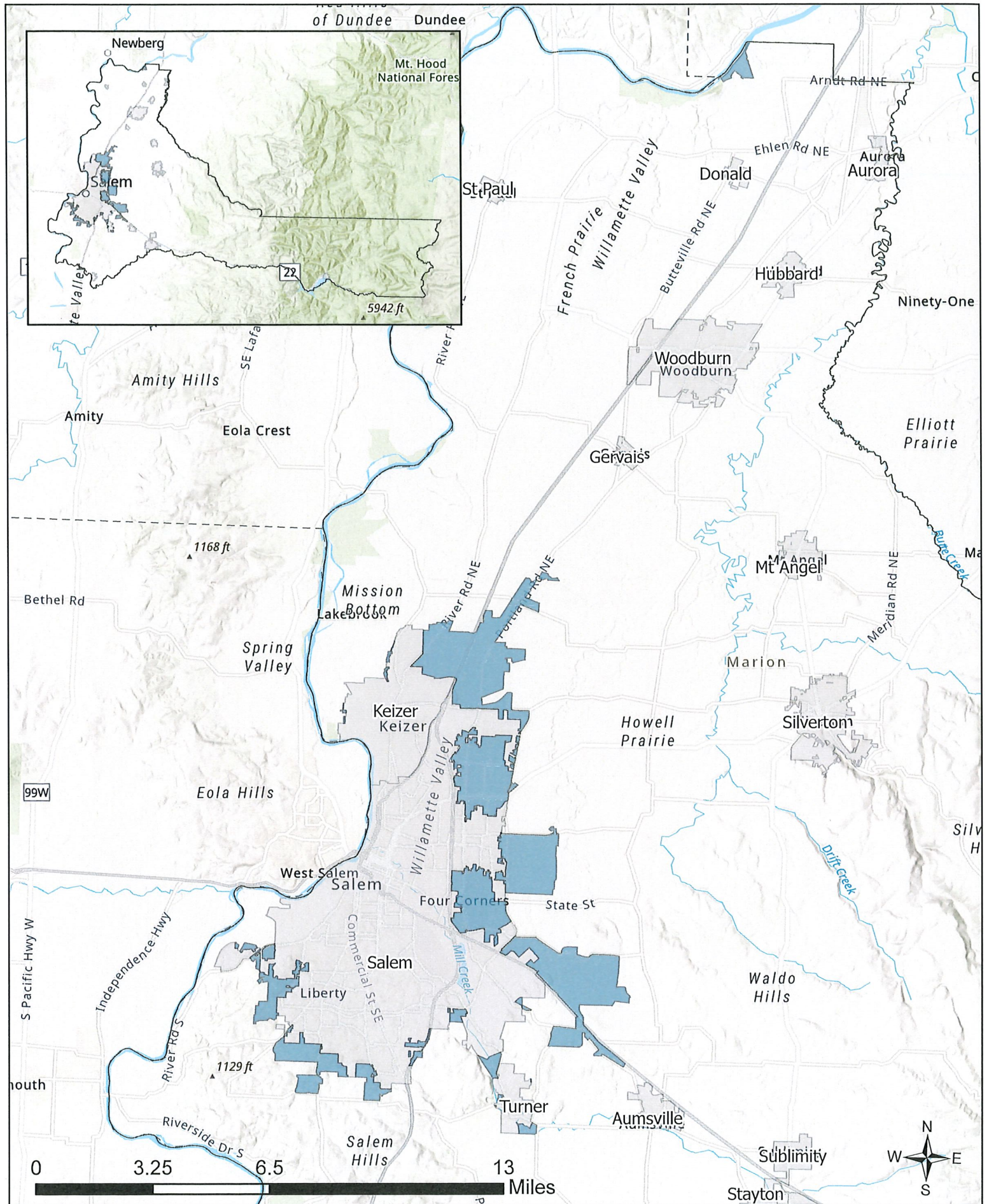
*Rationale*: The BMP manual addresses material disposal during the course of regular maintenance. Excess materials are deposited above the 100- year floodplain, at a supervisor approved site, and not within 75' of a stream, wetland, or riparian area. Crews are directed to follow the Erosion Control Table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

# Marion County MS4 Stormwater Management Area



Illicit Discharge Detection & Elimination  
Enforcement Procedure  
Updated: February 24, 2022

In the event a violation of County Code Chapter 15.15, STORMWATER DISCHARGE QUALITY CONTROL, is identified, the following steps shall be followed with the objective of ending the violation and bringing the responsible party into compliance. If pollutant is observed and identified, refer to the Marion County Pollutant Parameter Action Level document. Once the source of the illicit discharge is discovered and the responsible party identified, the Public Works Director and/or their designee (investigator) will look at past records to determine if this is a repeat violation:

Step 1. For repeat offenders and/or discharges involving hazardous materials, follow Steps 2 and 3 **immediately and in full**.

Step 2. The investigator will attempt to make contact onsite with the property owner and any firm or individuals involved with the illicit discharge, if the firm or individuals can be identified, or by phone, and communicate verbally the nature of the violation.

This verbal notification should include:

- a. How the discharge violates MS4 permit requirements or impacts water quality.
- b. The identified actions that must occur to end the discharge and remediate any impacts from the discharge.
- c. The identified financial penalties and other impacts to which the property owner may be subject.
  - i. For first time violators, when the discharge does not involve hazardous materials (as defined in MCC 15.15.030), the responsible party will be given a 5-day deadline to eliminate the discharge and make a best reasonable effort to remediate any impacts caused by the illicit discharge.

- ii. For repeat offenders, or when the discharge involves hazardous materials, the Step 3 Notice of Violation (NOV) will be issued with no 5-day grace period.

Step 3. If the violation(s) identified is not remediated by the deadline given in Step 2, or the responsible party is a repeat violator, or the discharge involves hazardous materials, a NOV letter will be issued in accordance with Marion County Codes 15.15.160, 15.15.180, and 15.15.190 and sent by certified mail to the property owner, any other responsible parties, and Marion County Code Enforcement. The NOV will include:

- a. A requirement for pollutant remediation and the requirement to cease any continued illicit discharge.
- b. A time frame, typically no longer than 7 business days from the date of the letter, in which the discharge is expected to be remediated.
- c. The requirements set forth in Marion County Code 15.15.190.
- d. The potential issuance of fines in accordance with Marion County Code 15.15.270.

Step 4. If the investigator, or their agent, returns after the time frame given in Step 3 to find the illicit discharge has not been remediated or that the discharge is ongoing, Marion County staff will:

- a. Pursue the issuance of fines in accordance with Marion County Code 15.15.270. Fines sought at this step constitute a continuing violation assessed from the date of the NOV.
- b. Evaluate potential actions to repair and abate the issue in accordance with Marion County Code 15.15.200. If repair and abatement is possible, and the attempt to seek resolution through fines or other methods has not been successful, pursue repair and abatement.

### Marion County Pollutant Parameter Action Levels

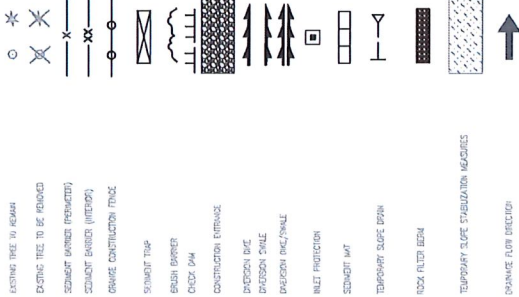
\*Parameters and Action levels may be adaptively managed if Marion County deems it necessary to accurately identify potential illicit discharges.

Pollutant Parameter	Potential Indicator of Illicit Discharge	Equipment	Action Level	Comments
Ammonia Nitrogen (NH <sub>3</sub> )	Used to distinguish between clean and contaminated water.	Lab	>0.5 mg/L	Levels at or above action levels likely indicate the presence of sewage, industrial wastewater or process water.
Color	Colors indicate different sources (ex: lime green color associates with anti-freeze). Brown, gray, yellow, green, orange or red water should be noted. Observations: Faint colors in sample bottle, clearly visible in sample bottle, clearly visible in outfall flow	Visual	Any presence prompts an investigation	Potable water has no color. Process water and wastewater may present a variety of colors. Used to distinguish between process or wastewater and potable or groundwater.
Conductivity	Conductivity can be strongly related with the total amount of dissolved material in water. Conductivity can have some value in detecting industrial discharges that have very high conductivity readings.	Oakton 54X002608C pH Meter	>250 µS	Action level indicates potential for unnatural sources of process water, leachate, or wastewater.
Floatables or Detergents (non-trash)	Floatables could include possible petroleum sheens, soap suds, or floating sanitary materials.	Visual	Any presence prompts an investigation	Some floatables such as toilet paper are indicators of illicit sanitary sewer connections. A sheen's origin can sometimes be determined by touching it with a stick-like object. If sheen breaks up into platelets or clumps, then it is likely due to the presence of naturally occurring bacteria in the water. If the sheen swirls, separates, and reforms, petroleum is likely present in the water.
Flow	Presence of flow from unknown source may indicate illicit discharge.	Visual	Any presence prompts an investigation	Source could be groundwater, leaking potable water, or an illicit discharge.
Odor	An odor at the site may be indicative of a rancid, sour, sulfide, chemical, sewage or petroleum-related source.	Scent	Any presence prompts an investigation	Odors may indicate an illicit discharge has occurred.
pH	Used to identify presence of liquid wastes from industrial processes. pH can be a good indicator of liquid wastes from industries, which can have very high or low pH.	Oakton 54X002608C pH Meter	Outside of range from 6.0 to 8.5	Values less than 6.0 are acidic and may indicate discharges from textile mills, pharmaceutical manufacturers, metal fabricators, and companies that produce resins, fertilizers, or pesticides. Values greater than 9.0 are alkaline and may indicate discharges from industries such as textile mills, metal plating facilities, steel mills, ready mix concrete plants (including concrete truck wash out areas), and producers of rubber and plastic
Temperature	Used to identify presence of wastewater and/or process water.	Oakton 54X002608C pH Meter	>68°F	Average shallow groundwater temperatures in Oregon range from about 50°F to 59°F. Potable water is generally below 59°F. Extreme temperatures may indicate an illicit discharge. Extremely warm temperatures can be indicative of industrial or sanitary sewer discharges.
Total Chlorine	Used to identify presence of commercial and or industrial wastewater.	Hach Total Colormeter	>0.5mg/L	If chlorine is at or above action levels, likely sources include commercial or industrial wastewater, or discharges from pools and hot tubs.
Turbidity	Indicates particulates (ex: sediment) and may range from slightly cloudy to completely opaque. Observation: Slight cloudiness, cloudy, opaque.	Visual	>15 NTU	Groundwater and potable water are generally very clear. Could indicate illicit discharge or issues with a pipe condition. Turbidity values >15 NTU indicate something other than a natural source.



LEGEND

EXISTING GRASS COVER (2 FT)  
EXISTING GRASS COVER (10 FT)

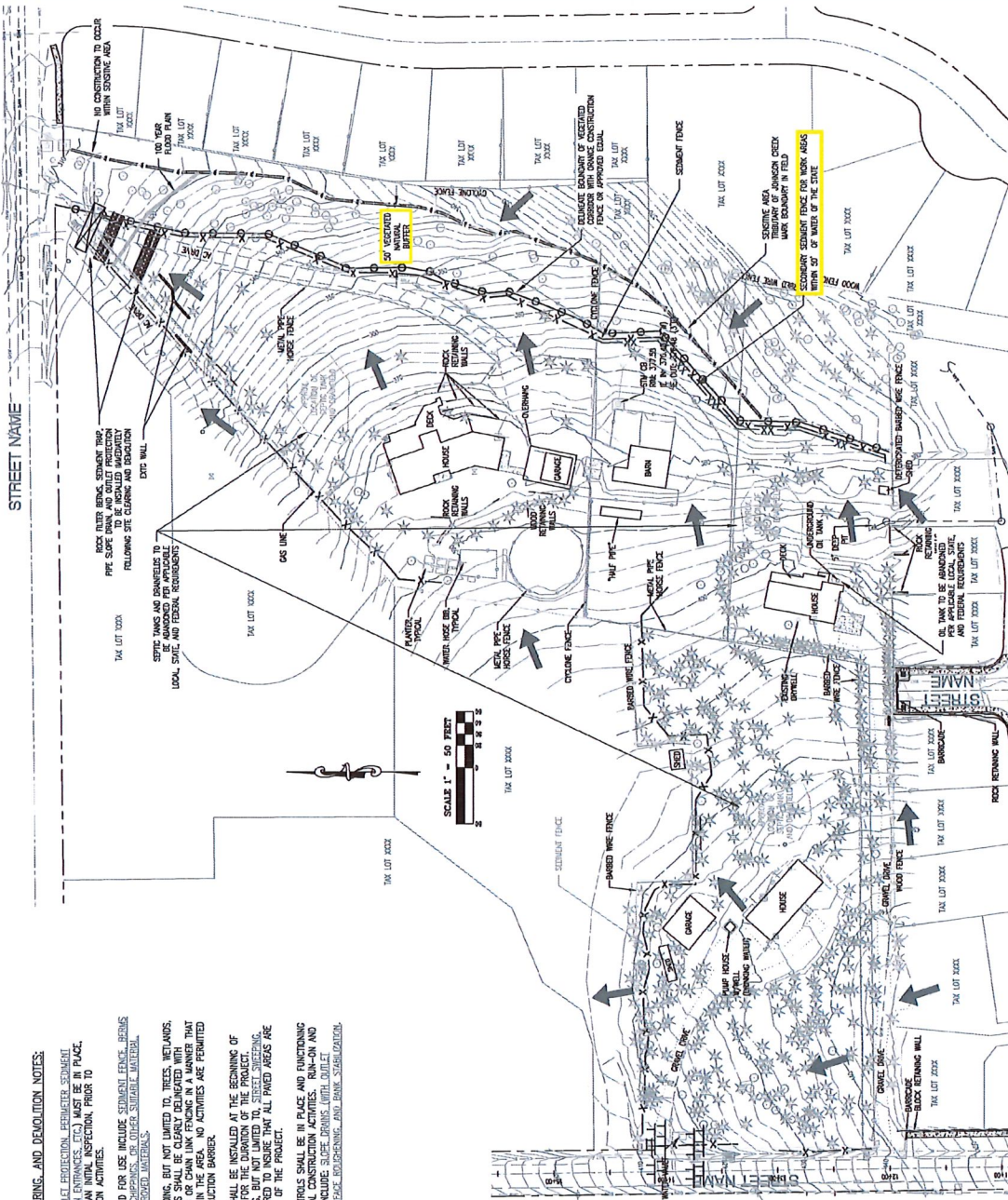


PRE-CONSTRUCTION, CLEARING, AND DEMOLITION NOTES:

1. ALL BASE EROSION MEASURES (QUIET EROSION, PERIMETER SEDIMENT TRAP, SLOPE PROTECTION, EROSION CONTROL MATS, EROSION CONTROL FENCING, AND APPROVED IN AN ANNUAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. SEDIMENT BARRIER APPROVED FOR USE INCLUDES SEDIMENT FENCE, BERING SEDIMENT FENCE, OR APPROVED EQUIVALENT. SEDIMENT BARRIERS SHALL BE MAINTAINED AT ALL TIMES AND SHALL BE REPAIRED OR REPLACED AS SOON AS POSSIBLE.
3. EROSION MEASURES INCLUDING, BUT NOT LIMITED TO, TRIP, NET LAWS, AND PERMANENT PROTECTION MEASURES SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEHIND THE CONSTRUCTION BARRIER.
4. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. CONSTRUCTION ENTRANCES SHALL BE MAINTAINED AT ALL TIMES AND SHALL BE REPAIRED OR REPLACED AS SOON AS POSSIBLE. ALL ENTRANCES SHALL BE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
5. RUN-ON AND RUN-OFF CONTROL MEASURES SHALL BE IN PLACE AND MAINTAINED PRIOR TO BEGINNING SURVEILLANCE CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE SLOPE DRAIN, SLOPE STABILIZATION, PROTECTION, CHECK DAMS, SLOPE PROTECTION, AND BANK STABILIZATION.

THESE EROSION AND SEDIMENT CONTROL PLANS ASSUME "DRY WEATHER" CONSTRUCTION. "WET WEATHER" CONSTRUCTION MEASURES NEED TO BE APPLIED BETWEEN OCTOBER 1ST AND MAY 31ST.

\* NOTE: PRE-DEVELOPED RUN-OFF SHEET CLOWS EXISTING WITH ON-SITE DRAINAGE AND INFILTRATION ONTO ADJACENT PROPERTIES.



REVISIONS:

CLEARING, DEMOLITION,  
MASS GRADING, EROSION AND  
SEDIMENT CONTROL PLAN

ENGINEERING FIRM

PREPARED FOR:

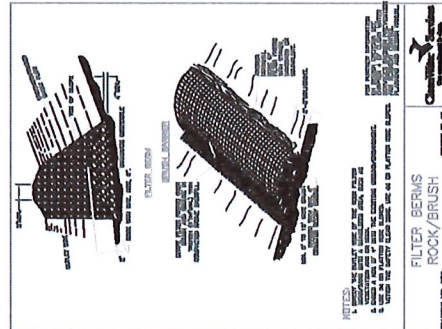
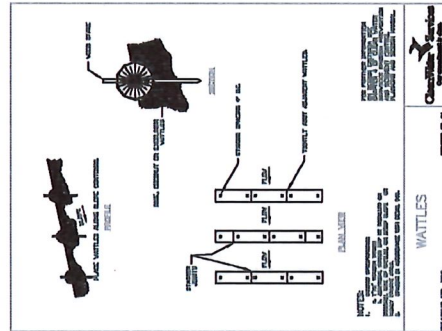
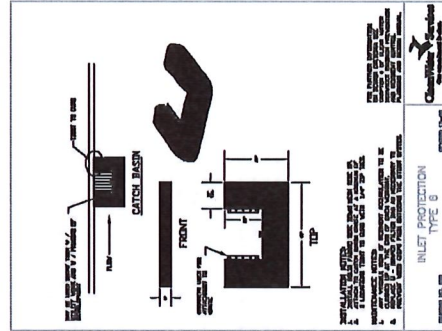
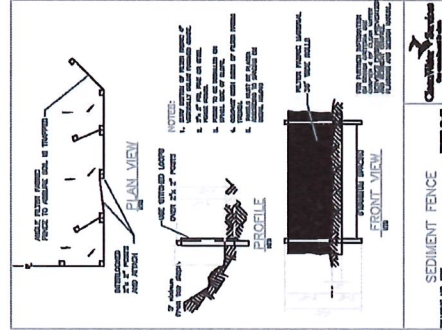
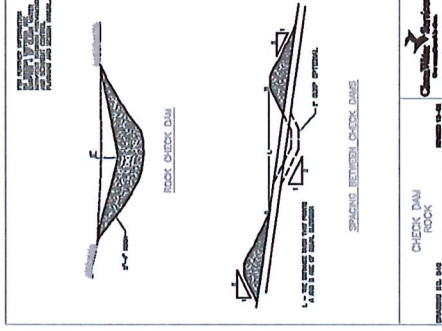
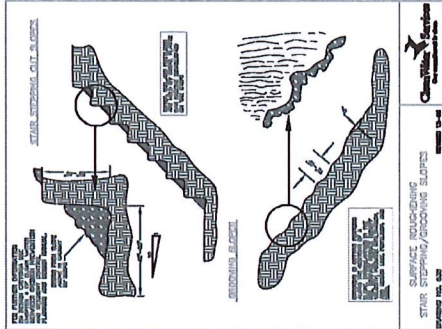
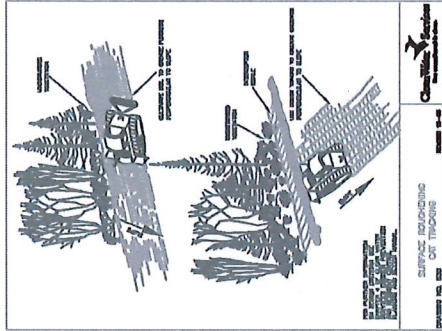
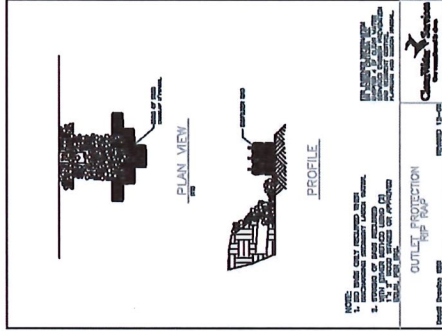
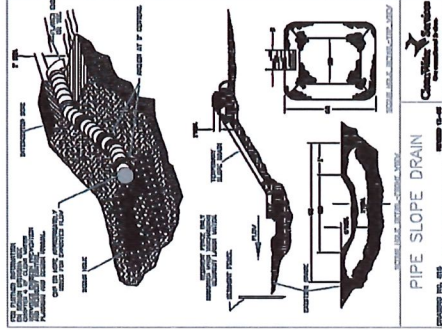
DATE: 10/10/2020  
SCALE: 1"=50'

WASHINGTON COUNTY  
OREGON  
WASHINGTON COUNTY TAC MAP

PROJECT NAME

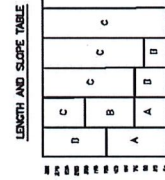
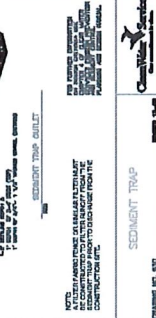
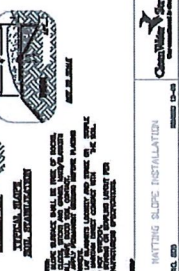
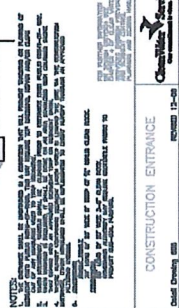
JOB NUMBER  
XXXX  
SHEET  
XXXX





EXAMPLE DETAILS SHOWN REPRESENT THOSE CHOSEN FOR THIS ESC TEMPLATE. USERS NEED TO CONSULT THE DEQ GUIDANCE MANUAL OR LOCAL AGENCY'S ESC MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE DETAILS.

REVISIONS: _____ _____ _____ _____ _____	<b>ENGINEERING FIRM</b> PREPARED FOR: _____		<b>PROJECT NAME</b> WASHINGTON COUNTY WASHINGTON COUNTY TDC MAP		DATE: _____
	DRAWN BY: _____ CHECKED BY: _____ DATE: _____	SCALE: _____ SHEET: _____ TOTAL SHEETS: _____	OREGON WASHINGTON COUNTY TDC MAP	OREGON WASHINGTON COUNTY TDC MAP	OREGON WASHINGTON COUNTY TDC MAP



MINIMUM TABLE PATTERN GUIDE AND RECOMMENDATION FOR SLOPE AND CHANNEL APPLICATION.



Marion County

OREGON

Public Works Land Development Engineering & Permits

5155 Silverton Rd NE

Salem, OR 97305

Ph. (503) 584-7714; Fax (503) 373-4418

<http://co.marion.or.us/PW/Engineering/>

LDEP EPSC Plan

Review Checklist

## Land Development Engineering & Permits (LDEP) Erosion Prevention and Sediment Control Plan Review Checklist

This checklist is used to review Applicant submitted Erosion Prevention and Sediment Control (EPSC) plans to ensure compliance with the County's DEQ Municipal Separate Storm Sewer System (MS4) Phase II General Permit and Marion County Code Chapter 15.10.

Review By:	
Date Reviewed:	
Project Name:	
Project Address:	
Date of Complete Application:	
Record #:	555- -PW
EPSC Package Submittal includes:	
<input type="checkbox"/> Completed and signed EPSC Submittal Checklist	
<input type="checkbox"/> One set of plans	
Plans include approvable:	
<input type="checkbox"/> Cover sheet	
<input type="checkbox"/> Pre-development sheet(s)	
<input type="checkbox"/> Post-development sheet(s)	
<input type="checkbox"/> Details sheet(s)	
Notes:	

**REMINDER: UPLOAD THE COMPLETED EPSC PLAN REVIEW FORM, APPROVED EPSC PLANS, AND ANY OTHER ASSOCIATED DOCUMENTS (I.E. PHOTOS, EMAILS) TO THE ACCELA PERMIT RECORD.**



Inspection Date: \_\_\_\_\_

## CESC SITE INSPECTION FORM

This form is to be used in conjunction with the Marion County Land Development Engineering & Permits – CESC Inspector's Guide

<b>Project Address:</b>			<b>Project ESCM:</b>		
<b>Inspector:</b>			<b>Permit Number:</b>	555-	-PW
<b>Inspection Type:</b>	<input type="checkbox"/> Pre-construction	<input type="checkbox"/> Implementation	<input type="checkbox"/> Final Closeout	<input type="checkbox"/> Complaint	<input type="checkbox"/> Visible Sediment
	<input type="checkbox"/> Post Rain Event - Within 24 hours of Event? <input type="radio"/> Yes <input type="radio"/> No <input type="checkbox"/> Random <input type="checkbox"/> Other, explain:				
<b>REMINDER: TAKE PHOTOS AS YOU CONDUCT YOUR INSPECTION</b>					
<b>WALK THROUGH</b>					
<b>Instructions:</b> Checking each box below indicates complete inspection of the items under the correlating number on the CESC Inspector's Guide:					
<input type="checkbox"/> 1) Schedule			<input type="checkbox"/> 6) Materials On-Hand		
<input type="checkbox"/> 2) Erosion and Sediment Control Plan (ESCP)			<input type="checkbox"/> 7) Maintenance		
<input type="checkbox"/> 3) Erosion and Sediment Control Manager (ESCM)			<input type="checkbox"/> 8) Monitoring Forms		
<input type="checkbox"/> 4) Sensitive Areas			<input type="checkbox"/> 9) Slope Protection & Stabilization		
<input type="checkbox"/> 5) Contingency Plan			<input type="checkbox"/> 10) Additional Items		
<b>List any observations of potential or existing 1) non-stormwater discharges, 2) illicit connections, and/or 3) pollutant discharges:</b>					
<b>List any changes made to ESCP and comment on related documentation:</b>					
<b>Document any Education and/or Instruction provided to ESCM regarding pollution prevention practices:</b>					
<b>Document any Follow-up or Corrective Actions Required Below: If none, check the box to the right</b>					<input type="checkbox"/> None Required
<b>Where on-site is the ESCP kept?</b>					
<b>Additional notes or comments:</b>					

**REMINDER: UPLOAD THE COMPLETED CESC SITE INSPECTION FORM AND ANY OTHER ASSOCIATED DOCUMENTS (I.E. PHOTOS) TO THE ACCELA PERMIT RECORD.**



## MARION COUNTY LAND DEVELOPMENT ENGINEERING & PERMITS CESC INSPECTOR'S GUIDE

**This guide is to be used in conjunction  
with the Marion County CESC Site Inspection Form**

### 1) Schedule

- Review the Contractor's schedule for any conflicts.
- Verify necessary Best Management Practices (BMPs) are installed prior to any ground disturbing activity.
- Verify if ground disturbing activity within highly erosive soils is being performed during the wet weather season.
- Grubbing of areas that will be worked on much later should be delayed.
- Staging of projects may require staging of erosion control measures.
- Confirm seeding is scheduled appropriately prior to end of applicable seeding dates.
- Verify if there are any "in-stream" work areas that may alter the contractor's schedule.
- Verify contractor's timeline for removal of BMPs if available.

### 2) Erosion and Sediment Control Plan (ESCP)

- Walk project during preliminary or advanced plan review and look for potential erosion problems
- Verify review of the Contractor's ESCP and that it is adequate and makes sense for the project. The ESCP included in a big package may need modification to address site conditions or staging.
- Walk project with Erosion and Sediment Control Manager prior to any ground disturbing activity looking for needed modifications of the ESCP.
- Verify ESCP is being kept up-to-date and modified as needed.
- Verify ESCP is kept on-site and is easily accessible.
- Verify the contractor has an erosion control plan for offsite borrow sources and waste areas.

### 3) Erosion and Sediment Control Manager (ESCM)

- Verify who the identified ESCM for the project is.
- Verify qualifications and knowledge of the identified ESCM.
- Verify ESCM's understanding of all required duties.
- Verify ESCM has authority to direct resources and make changes in an emergency.

### 4) Sensitive Areas

- Verify if there are sensitive areas which may require "extra" attention.
- Verify if all sensitive areas have been adequately addressed on the ESCP.
- Verify if additional monitoring is required or necessary for any sensitive areas.

### 5) Contingency Plan

- Confirm a contingency plan exists in the event of an unexpected event.
- Confirm a contingency plan exists for stabilization of any ground disturbing activity performed after seeding dates.

#### 6) Materials On-Hand

- Confirm adequate materials are on-hand to cover each phase of work planned to be performed.

Note:

-It may be difficult to get Erosion Control materials in the middle of the wet season. It is easier to deal with erosion before it happens rather than after.

#### 7) Maintenance

- Consider access for maintenance of BMPs. Confirm BMPs are placed where they are easy to maintain if there is a choice.
- Confirm erosion and sediment controls are properly installed and in good working order.
- Confirm catch basins are cleaned out when more than 6 inches of sediment depth accumulates.
- Confirm all sediment fences, barriers, check dams, and inlet protections are cleaned out when sediment reaches 1/3 of the storage depth.
- Confirm construction entrances are maintained with fresh rock to prevent tracking of sediment onto pavement.

#### 8) Monitoring Forms

- Confirm permit required visual self-inspections are being conducted.
- Confirm self-inspection records are available on-site and are located with the most recent ESCP.
- Confirm self-inspection records are being completed adequately to represent the site conditions and work performed.

#### 9) Slope Protection & Stabilization

- Confirm all highly sensitive areas are protected.
- Confirm temporarily stabilization of areas of unfinished ground disturbing activity scheduled for re-disturbance at a later date (i.e. straw mulch, chemical soil stabilizers, plastic sheeting, matting, etc.)

Notes:

-When permanently finishing slopes go from the top down and seed as you go.  
-Track walk slopes to provide loosened soil and hold seed.

#### 10) Additional Items

- Verify performance of newly installed BMPs is adequate.
- If applicable, confirm contractor's ESCP addresses dust control and/or wind erosion.
- If applicable, confirm any changes in runoff and drainage patterns by snow melt are addressed on the ESCP.



**Marion County**  
**OREGON**

POLICY NUMBER 02  
APPROVED *aj*  
ISSUE DATE 8/17/20

**LDEP POLICY & PROCEDURES MEMORANDUM**

**RE: Construction Erosion and Sediment Control Enforcement Procedure**

**POLICY**

In the event that a violation of Marion County Code Chapter 15.10 is discovered, the following series of escalations shall be followed in an attempt to end the violation of Marion County's Construction Erosion and Sediment Control Code, and bring the responsible party/project into compliance. When a non-compliance of a construction site is discovered:

1. The inspector will look at past applicable records to determine if this is a repeat violation. This will impact the enforcement actions taken if a violation is confirmed to be occurring.
  - a) For repeat violations, follow the same procedure, but also initiate issuance of fine for violation in accordance with step 5.
2. The inspector will attempt to make contact onsite and communicate verbally the nature of the violation, why it matters, what needs to happen to end the non-compliance, a deadline for remediation not to exceed 5 business days, and what the potential consequences are, both for the construction project, and for the County as a whole.
  - a) If contact cannot be made onsite the Applicant of record for the permit will be contacted and the information mentioned previously will be communicated.
3. If the violation(s) identified are not remediated by the deadline given in Step 2 or the site is found to continually violate the CESC permit, a Stop Work Order (SWO) letter (in accordance with County Code 15.10.110) requiring the remediation of the violation(s) and non-compliant site conditions, sent by certified mail, shall be issued to the Applicant(s).
  - a) This Stop Work Order will include a deadline not to exceed 7 business days from the date of the letter in which it is anticipated the violation(s) will be corrected.
  - b) In addition to the certified mailing, an email containing a signed copy of the letter may be sent to the Applicant of record to ensure receipt of the letter.
  - c) In accordance with Marion County Code 15.10.110(B) a copy of the Stop Work Order will be posted at the project site.
  - d) Issuance of a SWO requires the prior approval of the LDEP Supervisor
4. If a SWO is issued, and the violation is not remedied by the deadline given in the SWO, the Sheriff's Office shall be notified to initiate issuance of a fine for a non-continuing violation in accordance with County Code 15.10.120.
  - a) If the violations noted in the SWO are corrected prior to the deadline provided in the SWO, and no other CESC violations need be corrected, then the Stop Work Order will be removed and the Sheriff's Office not notified.
  - b) If it is necessary to issue a second SWO for the same project this will be treated as a continuing violation per Step 5.

Memorandum  
RE: Construction Erosion and Sediment Control Enforcement Procedure  
August 17, 2020

5. If the SWO is violated (i.e. construction work other than that related to remedying the violation(s) is conducted prior to removal of the SWO), or it is necessary to issue multiple for the same project, contractor, developer or property owner, the Marion County Sheriff's office shall be notified to initiate the issuance of a penalty fine for a continuing violation in accordance with County Code 15.10.120. Fines shall be determined from the date the County was first made aware of the initial violation(s).

#### **BACKGROUND**

A written procedure for Construction Erosion and Sediment Control code violations provides staff guidance for a previously undefined process. This will ensure consistency and equity in how the County approaches developments that fail to meet County code for erosion and sediment control.

#### **ATTACHMENTS**

1. Marion County Code Chapter 15.10

## Chapter 15.10 CONSTRUCTION EROSION AND SEDIMENT CONTROL

### Sections:

- 15.10.010 Title.**
- 15.10.020 Purpose.**
- 15.10.030 Definitions.**
- 15.10.040 Repealed.**
- 15.10.050 Permit required.**
- 15.10.060 Erosion prevention and sediment control plan.**
- 15.10.070 Permit fee.**
- 15.10.080 Construction site deposits on public streets and into storm drains.**
- 15.10.090 Maintenance.**
- 15.10.100 Falsifying information.**
- 15.10.110 Stop work orders.**
- 15.10.120 Penalties.**
- 15.10.130 Enforcement.**
- 15.10.140 Other remedies.**

#### **15.10.010 Title.**

This chapter shall be known as the construction erosion and sediment control ordinance of Marion County.  
[Ord. 1307 § 1, 2010.]

#### **15.10.020 Purpose.**

The purpose of this chapter is to minimize the amount of sediment reaching waterways, wetlands, and the public storm drainage and surface water system for the duration of construction site activities. [Ord. 1307 § 2, 2010.]

#### **15.10.030 Definitions.**

For the purposes of this chapter, the following words shall have the following meanings:

“Applicant” means the owner of real property or the owner’s authorized agent. “Applicant” includes any person who would be required to obtain a Marion County permit or exemption approval, but who neglects or otherwise fails to do so.

“Authorized agent” means the developer, architect, contractor, engineer, builder, personal representative, or anyone designated by the owner to have control or supervision of a site involving construction site activity.

“Construction site activity” means ground disturbing activities at a location where a Marion County permit or exemption approval is required.

“Director” means the director of public works or the director’s designee.

“Emergency” has the same meaning as found in ORS 401.025.

“Erosion” means the wearing away of the ground surface, or the movement, detachment or dislocation and transport of sediment including soil particles by the action of water or wind.

"Exemption approval" means an exemption from the requirement to obtain a building permit for an agricultural building.

"Ground disturbing activities" means any activity that exposes soil, including, but not limited to, grading, excavating, filling, clearing, or working of land at a particular location.

"High-risk area" means an area that the board of commissioners has established by order to be at high risk for erosion or sediment dispersal to a water body due to the following conditions: erosive soils, steep slopes, or close proximity to a water body.

"Large development ground disturbing activities" means any activity that exposes soil covering one acre or more of land surface area, either in isolation or as part of a subdivision, partition, or planned unit development, including, but not limited to, construction, landscaping, removal of vegetation, stockpiling of soil or construction debris, grading, filling, excavating, trenching, drilling, transport or fill, or utility work at a particular location.

"Public storm drainage and surface water system" means natural or manmade drainage courses for the conveyance of surface water.

"Sediment" means finely divided loose material that can be suspended and transported in water or air and may originate from disturbed soil, landscaping, or construction activities or materials.

"Storm event" means one-half inch or more of precipitation in a 24-hour period.

"Stormwater management area" means an area designated as a stormwater management area by the Department of Environmental Quality. [Ord. 1316 § 3(I), 2011; Ord. 1307 § 3, 2010.]

#### **15.10.040 Exempt activity.**

*Repealed by Ord. 1316. [Ord. 1307 § 4, 2010.]*

#### **15.10.050 Permit required.**

A. An erosion prevention and sediment control permit is required inside a stormwater management area if construction site activity takes place within a high-risk area.

B. A large development erosion prevention and sediment control permit is required inside a stormwater management area for large development ground disturbing activities. [Ord. 1316 § 3(II), 2011; Ord. 1307 § 5, 2010.]

#### **15.10.060 Erosion prevention and sediment control plan.**

A. An erosion prevention and sediment control plan is required for all erosion prevention and sediment control permits. The plan must be submitted by the applicant and approved by the director for issuance of the erosion prevention and sediment control permit, prior to the issuance of a Marion County permit or exemption approval and commencement of ground disturbing activities. The plan must contain protection techniques that will eliminate runoff siltation created from the construction activity both during and after construction. Site-specific considerations shall be incorporated.

B. The county may require that the applicant design and construct a temporary drainage system that will ensure any off-site impacts caused by the construction site activity can be mitigated.

C. The department of public works may perform inspections to ensure compliance with this chapter at the discretion of the director. [Ord. 1307 § 6, 2010.]

#### **15.10.070 Permit fee.**

The county may establish a fee for review of plans and inspections required by this chapter by order of the board of commissioners. The board of commissioners shall set the fee to recover the public works department costs of providing an applicant's erosion prevention and sediment control permit, inspections, and plan review. [Ord. 1307 § 7, 2010.]

**15.10.080 Construction site deposits on public streets and into storm drains.**

No person shall cause or allow visible and measurable erosion or sediment related to construction site activity inside a stormwater management area as defined herein to enter the public storm drainage and surface water system. Any person causing visible and measurable erosion or sediment shall immediately abate or remove it. The removal shall be accomplished by hand labor or approved mechanical means. [Ord. 1307 § 8, 2010.]

**15.10.090 Maintenance.**

A. The applicant shall maintain all erosion and sediment control measures in proper functioning order for the duration of the ground disturbing activities or until adequate ground cover has been established.

B. The applicant shall inspect, maintain, adjust, repair, and replace erosion and sediment control measures as necessary within 24 hours following a storm event to ensure that the measures are functioning properly.

C. During active ground disturbing activity, the applicant shall inspect and maintain erosion and sediment control measures weekly or within 24 hours of a storm event. [Ord. 1307 § 9, 2010.]

**15.10.100 Falsifying information.**

No person shall knowingly make any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to this chapter. [Ord. 1307 § 10, 2010.]

**15.10.110 Stop work orders.**

A. In the event there is a violation of this chapter and it is necessary to obtain compliance with this chapter, the director may issue a stop work order requiring that all work, except work directly related to the elimination of the violation, be immediately and completely stopped. If the director issues a stop work order, the applicant shall not resume work until such time as the director gives specific approval in writing. The stop work order shall include:

1. The date of the stop work order;
2. The erosion prevention and sediment control permit and/or permit or exemption approval number if applicable;
3. The site address, legal description or location applicable to the stop work order;
4. A description of all violations; and
5. The conditions under which the work may resume.

B. The stop work order shall be in writing and posted in a conspicuous location at the site. Other means of communication of the stop work order may be exercised in the discretion of the director.

C. No person may remove, obscure, mutilate or otherwise damage a stop work order.

D. A stop work order shall be effective upon posting or upon verbal delivery under subsection (E) of this section.

E. When an emergency condition exists, the director may issue a stop work order verbally. A written stop work order shall be posted in a conspicuous location at the site within 24 hours of the verbal order. [Ord. 1307 § 11, 2010.]

**15.10.120 Penalties.**

A. Any person who is cited for a violation of this chapter shall be subject to a fine of not more than \$500.00 for a noncontinuing violation and a fine of not more than \$1,000 for a continuing violation.

B. Each day that this chapter is violated shall constitute a separate violation. [Ord. 1307 § 12, 2010.]

**15.10.130 Enforcement.**

The provisions of this chapter are enforceable pursuant to Chapter 1.25 MCC. [Ord. 1307 § 13, 2010.]

**15.10.140 Other remedies.**

The provisions of this chapter are in addition to and not in lieu of any other procedures and remedies provided by law including equitable relief and damages. [Ord. 1307 § 14, 2010.]

Mobile Version