

**Clackamas County  
Department of Transportation and Development**

**National Pollutant Discharge Elimination System  
Municipal Separate Storm Sewer System  
(MS4) Discharge Permit**

**Annual Report  
For  
July 1, 2021 – June 30, 2022**



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**Clackamas County Department of Transportation and Development**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) MUNICIPAL SEPARATE  
STORM SEWER SYSTEM (MS4) PERMIT**

I, the undersigned, hereby submit this National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater System Annual Report in accordance with NPDES Permit Number 101348. 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 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 known violations.

\_\_\_\_\_  
Name: Dan Johnson

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Date

Title: Director

Clackamas County Department of Transportation and Development

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## **1.0 INTRODUCTION AND BACKGROUND**

### **1.1 Background**

Clackamas County, represented by the County's Department of Transportation & Development (DTD), is a co-permittee on the Clackamas County Phase I Municipal Separate Storm Sewer (MS4) National Pollution Discharge Elimination System (NPDES) Permit. The other Phase I co-permittees on this same MS4 permit include Water Environment Services (WES), Oak Lodge Water Services (OLWS), and the following cities: Happy Valley, Rivergrove, Oregon City, Lake Oswego, West Linn, Milwaukie, Gladstone, Wilsonville, and Johnson City. Phase I communities are generally those with a population of 100,000 or more. The Clackamas County co-permittees are classified as Phase I communities because they meet this threshold collectively, though not separately. The Clackamas County MS4 permit was issued by the Oregon Department of Environmental Quality (DEQ) to the co-permittees on December 15, 1995 and was most recently renewed on March 16, 2012. Clackamas County has also received the new MS4 permit, issued on September 15, 2021. Future year annual reports will comply with this new permit.

In order to address the County's MS4 Permit requirements, DTD regularly works in collaboration with WES & OLWS.

The October 7, 2010 Clackamas County DTD Stormwater Management Plan (SWMP) is the SWMP which was in effect during the 2021-2022 reporting year.

### **1.2 Permit Area Description**

Although Clackamas County's DTD administers its own SWMP, all of the geographic areas where this SWMP applies overlap with the geographic area of at least one other co-permittee. Most of the geographic areas where DTD's SWMP applies are in WES and OLWS, and smaller areas exist in some cities where County-maintained roadways are present. Please see the annual reports which were filed by other co-permittees for more information about work which was accomplished in those areas.

### **1.3 Document Organization**

According to Schedule B(5) of the MS4 Permit, each co-permittee must submit an annual report. Table 1 summarizes the annual report submittal requirements and provides the location in this document where each of the requirements is addressed.

**TABLE 1: ANNUAL REPORT SUBMITTAL REQUIREMENTS**

<b>Annual Report Submittal Requirements:</b>	<b>Section where the Requirement is Addressed</b>
Schedule B(5)(a): Status of implementing the stormwater management program and each SWMP element, including progress in meeting the measurable goals identified in the SWMP.	Tables 2-8
Schedule B(5)(b): Status or results, or both, of any public education program effectiveness evaluation conducted during the reporting year and a summary of how the results were or will be used for adaptive management.	Table 4's BMP 10
Schedule B(5)(c): A summary of the adaptive management process implementation during the reporting year, including any proposed changes to the stormwater management program(e.g., new BMPs) identified through implementation of the adaptive management process.	Section 4.1
Schedule B(5)(d): Any proposed changes to SWMP program elements that are designed to reduce TMDL pollutants to the MEP	Section 4.2
Schedule B(5)(e): Summary of total stormwater program expenditures and funding sources during the 2021-2022 year and those anticipated in 2022-2023	Section 3.0, including Table 9
Schedule B(5)(f): A summary of monitoring program results, including monitoring data that are accumulated throughout the reporting year and any assessments or evaluations conducted.	Section 4.3
Schedule B(5)(g): Any proposed modifications to the monitoring plan that are necessary to ensure that adequate data and information are collected to conduct stormwater program assessments.	Section 4.3
Schedule B(5)(h): A summary describing the number and nature of enforcement actions, inspections, and public education programs, including results of ongoing field screening and follow-up activities related to illicit discharges.	Tables 2-4 and 7
Schedule B(5)(i): A summary, as it relates to MS4 discharges, describing land use changes, Urban Growth Boundary (UGB) expansion, land annexations, and new development activities that occurred within these areas during the reporting year. The number of new post-construction permits issued and an estimate of the total new and replaced impervious surface area	Section 4.4

related to development projects that commenced during the reporting year must also be included.	
Schedule B(5)(j): A summary, as related to MS4 discharges, describing concept planning or other activities conducted in preparation of UGB expansion or land annexation, if anticipated for the following year.	Section 4.4
Schedule B(5)(k): The TMDL Pollutant Load Reduction Evaluation as described in Schedule D(3)(c), the Wasteload Allocation Attainment Assessment as described in Schedule D(3)(b), and the 303(d) evaluation as described in Schedule D(2).	Section 4.5
Schedule A (4) (e): Provisions shall be provided for receiving and considering public comments on the draft annual report.	Section 4.6

## 2.0 STATUS OF STORMWATER MANAGEMENT PROGRAM IMPLEMENTATION

Clackamas County's Dept. of Transportation & Development (DTD) and some of its divisions are responsible for supplementing the efforts of OLWS, WES, and selected Cities for the implementation of the stormwater management program, which the MS4 Permit mandates. Divisions within DTD that implement components of this program include:

- Engineering Site Development for code compliance and enforcement
- Transportation Maintenance for county road rights of way maintenance
- Land Use and Zoning for new development review and permits
- Transportation Engineering

The scope of DTD's SWMP tends to be limited to work which is conducted in Clackamas County-maintained road right-of-ways, but exceptions to this rule, such as SWMP BMP #14 ("Update Procedures for New Development"), are present.

The eight components of the October 7, 2010 DTD SWMP, and the seventeen SWMP BMPs that are implemented to address each component, are listed below. For ease of review, the organization of CCDTD's SWMP and this 2021 -2022 annual report aligns with the format which is found in Schedule A of the MS4 permit which was renewed on March 16, 2012. Future year reports will align with CCDTD's revised, Shared SWMP and the new MS4 permit, issued on September 15, 2021.

### **Component #1 - Illicit Discharge Detection and Elimination**

BMP 1: Conduct Dry Weather Inspections

BMP 2: Implement the Spill Response Program BMP

BMP 3: Legal Authority and Procedures to Respond to Reports of Illicit Discharges

### **Component #2 - Industrial and Commercial Facilities**

*Not Applicable to Clackamas County Department of Transportation and Development*

### **Component #3 - Construction Site Runoff**

BMP 4: Provide Information/Training for Construction Site Operators

BMP 5: Conduct Procedures for Site Plan Reviews

BMP 6: Conduct Enforcement Activities

BMP 7: Conduct Site Inspections

### **Component #4 - Education and Outreach**

BMP 8: Publish and Distribute News Letters

BMP 9: Continue Cooperative Educational and Outreach Efforts with Others

BMP 10: Participate in a Public Education Effectiveness Evaluation

BMP 11: Training for Employees

### **Component #5 - Public Involvement and Participation**

BMP 12: Provide for Public Participation with SWMP and Benchmark Submittals



**Component #6 - Post-Construction Site Runoff Control**

BMP 13: Planning Procedures for New CIP Development

BMP 14: Update Procedures for New Development

**Component #7 - Pollution Prevention for Municipal Operations**

BMP 15: County Roadway Operations and Maintenance Program

BMP 16: Pesticide, Herbicide and Fertilizer Programs

**Component #8 - Structural Stormwater Facility Operations and Maintenance**

BMP 17: Maintenance of Structural Controls

On the pages that follow, Tables 2 through 8 describe the measurable goals, provide the progress attained in 2021-2022 for each goal and present tracking measures along with the data used to track those measures.

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**SWMP Component #1  
Illicit Discharge Detection and Elimination**

**TABLE 2 – Illicit Discharge Detection and Elimination BMPs**

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2021-2022
<p><b>1: Conduct Dry Weather Inspections</b></p>	<p><b>Responsible for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> CCDTD will facilitate identifying the presence and location of any major outfalls in the county road rights of way within the high priority areas, and determine whether additional dry weather screening is warranted.</p> <p><b>Measurable Goal:</b> By June 30, 2012, facilitate a County resolution to identify the presence and location of major outfalls in the county road rights of way within the high priority areas, determine the need for a plan to address dry weather screening, and clarify the responsibilities.</p> <p><b>Progress on Measurable Goal:</b> Portions of this Measurable Goal have been met. Major outfalls in the county road rights of way within the high priority areas have been located. It has been determined that a separate DTD plan for conducting dry weather screening in WES &amp; OLWS service areas is not needed.</p>	<p>(1) Number of major outfalls in county road rights of way within high priority areas.</p> <p>(2) Determine need for a dry weather screening plan for located outfalls.</p>	<p>(1) 29 are in WES: 29 in CCSD#1 and zero are in SWMACC 14 are in OLWS.</p> <p>(2) WES and OLWS are responsible for conducting dry weather screening work.</p>
<p><b>2: Implement the Spill Response Program</b></p>	<p><b>Responsible for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> CCDTDs Transportation Maintenance Division follows with provisions the Oregon Department of Transportation’s <i>Routine Road Maintenance, Water Quality and Habitat Guide, Best Management Practices Guide</i>, which was revised in 2020 (ODOT Guide), for work within the county road rights of way. The stated stormwater management goal is “to reduce or eliminate pollutants of concern, to the maximum extent practicable, from entering the waters of the state.” These activities are compiled in ODOT Guide.</p>	<p>(1) Annual number and type of spills reported during road maintenance activities in the county road rights of way.</p> <p>(2) Annual number of illicit discharges</p>	<p>(1) Zero (0) spills observed and/or reported during road maintenance activities</p> <ul style="list-style-type: none"> <li>- One (1) spill (by others) was responded to and cleaned up by CCDTD.</li> <li>- Zero (0) spills were responded to by OLWS.</li> </ul>

	<p>“Accident Clean-up” is identified as Activity 149. The goal is to restore the transportation system following unforeseen incidents. Steps include:</p> <ul style="list-style-type: none"> <li>• Assess the situation for safety considerations.</li> <li>• Stop and contain any spill if appropriate.</li> <li>• Call County hazmat coordinator or environmental staff (including WES) for assistance as needed.</li> <li>• Provide traffic control as appropriate.</li> <li>• Notify Oregon Emergency Response System when applicable: <ul style="list-style-type: none"> <li>○ <u>Activating OERS</u>: <ul style="list-style-type: none"> <li>▪ Local public safety agencies such as law enforcement, fire and emergency medical services normally provide the first response to an incident. Access to this local assistance is through 9-1-1.</li> <li>▪ Once notified, local public safety agencies would call OERS at 800-452-0311 or Salem Area 503 378 6377. If necessary, responsible parties would then call the National Response Center at 800-424-8802.</li> </ul> </li> </ul> </li> </ul> <p>Larger spills are forwarded to WES, DEQ and/or the applicable fire district.</p> <p>A database maintained by the Transportation Maintenance Division documents illicit discharges within the county roads rights of way.</p> <p><b>Measurable Goal:</b> Implement the spill response program (Accident Clean-up, ODOT Guide Activity 149) and track the number of spills and illicit discharges within the county road rights of way in the high priority areas.</p> <p><b>Progress on Measurable Goal:</b> <span style="color: green;">Attained</span></p>	<p>reported to the CCDTD Transportation Maintenance Division within the county road rights of way.</p>	<ul style="list-style-type: none"> <li>- Private vendor(s), ODOT, WES, Fire Department(s) or others handled all other reported spills not responded to by CCDTD or OLWS.</li> </ul> <p>(2) Reported illicit discharges: Zero (0) reported to CCDTD.</p> <ul style="list-style-type: none"> <li>- Responded to: Zero (0)</li> <li>- Two (2) illicit discharges within county road rights of way were reported to OLWS. WES managed other illicit discharges within their service area.</li> </ul>
<p><b>3: Legal Authority and Procedures to Respond to Reports of Illicit Discharges</b></p>	<p><b>Responsible for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> CCDTD relies on several regulatory mechanisms that prohibit release of illicit discharges into the MS4 permitted area and outline response and enforcement procedures. These include:</p> <ul style="list-style-type: none"> <li>• Water Environment Services (WES) Surface Water Management Rules and Regulations</li> <li>• The Oak Lodge Water Services authority</li> <li>• General Clackamas County Code enforced according to the process developed and conducted by CCDTD’s Code Enforcement Section.</li> </ul>	<ul style="list-style-type: none"> <li>- Status of any applicable regulatory updates or modification.</li> <li>- Annual number of reported alleged illicit discharges and un-authorized non-</li> </ul>	<p>No regulatory updates or modifications to report in 2021-2022</p> <ul style="list-style-type: none"> <li>- CCDTD was not notified of any illicit discharges and therefore responded to zero (0) illicit discharges.</li> <li>- Oak Lodge Water Services received reports of seven (7) alleged illicit discharges and WES managed other</li> </ul>

	<ul style="list-style-type: none"> <li>• Clackamas County Roadway Standards</li> <li>• CCDTD BMPs for Routine Road Maintenance Manual</li> </ul> <p>In the event an illicit discharge within a county road right of way is observed by county staff, other agencies, or reported by the public, CCDTD will attempt to confirm the allegation and determine a course of action in a timely manner. CCDTD relies on the regulatory mechanisms listed above, if illicit discharges are reported or encountered.</p> <p><b>MS4 Permit Schedule B(5)(h)</b> specifies that the following information be provided in each annual report: Summary of the number and nature of enforcement actions, inspections, and public education programs, including results of ongoing field screening and follow-up activities related to illicit discharges. CCDTD did not respond to any illicit discharges and relies on our partner agencies to respond when enforcement actions or inspections are required. For information on the implementation of IDDE Program public education and field screening programs, please see the MS4 annual reports which have been submitted by OLWS and CCSD#1/SWMAACC, for DTD works in partnership with them to implement those portions of the stormwater management program which is mandated by the MS4 Permit.</p> <p><b>Measurable Goals:</b></p> <ul style="list-style-type: none"> <li>• MG #1: Respond to reports involving alleged illicit discharges within county road rights of way in a timely manner (ex. informing appropriate municipality, service district, DEQ, etc.).</li> <li>• MG #2: Follow enforcement response procedures upon identification of illicit discharges as warranted and applicable.</li> </ul> <p><b>Progress on Measurable Goals:</b></p> <ul style="list-style-type: none"> <li>- MG #1: Attained. In coordination with WES, OLWS, Private vendor(s), ODOT, Fire Department(s) and others, all reported illicit discharges were responded to in a timely manner and handled appropriately.</li> <li>• MG #2: Attained. CCDTD, OLWS and WES have enforcement response procedures in place.</li> </ul>	stormwater discharges.	illicit discharges within their service area.
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**SWMP Component #2  
Industrial and Commercial Facilities**

Clackamas County's Department of Transportation & Development (DTD) works in partnership with OLWS, CCSD#1, and SWMACC to implement the stormwater management program which is mandated by the MS4 Permit. DTD's portion of the partnership does not include the implementation of any industrial/commercial stormwater program BMPs.

**SWMP Component #3  
Construction Site Runoff Control**

**TABLE 3—Construction Site Runoff Control BMPs**

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2021-2022
<p><b>4: Provide Information/ Training to Construction Site Operators</b></p>	<p><b>Responsible for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> CCDTD participates in educational and training measures for construction site operators. These activities include the following:</p> <ul style="list-style-type: none"> <li>• CCDTD Engineering Division conducts preconstruction meetings with in-house and contracted construction staff prior to commencement of county roadway capital improvement construction projects. Regulatory requirements, site, stormwater, and environmental protection measures are highlighted.</li> <li>• Training of CCDTD Transportation Maintenance Division staff is a required component of its adopted <i>CCDTD Best Management Practices for Routine Road Maintenance</i> program. This training program is ongoing and includes such topics as erosion and sediment control, ESA/permitting awareness and understanding, and stormwater and sanitary collection system maintenance, etc.</li> <li>• CCDTD development and planning staff provides information to developers and contractors during plan review and in the development of County roadway capital improvement projects to address regulatory requirements, facilitate the identification and implementation of appropriate stormwater BMPs, and provide additional information and suggestions.</li> </ul>	<p>(1) Annual number of project-specific preconstruction conferences conducted by/for CCDTD Engineering and Transportation Maintenance Divisions.</p>	<ul style="list-style-type: none"> <li>• The CCDTD Engineering Division conducted five (5) project specific preconstruction conferences for CIP projects within the MS4 permit area:</li> <li>• CCDTD Maintenance staff conduct environmental and safety-related "tailgate" meetings on a daily and/or weekly basis. Additionally, the Maintenance Division gathers inside for an all staff, all-day training opportunity 2 to 3 times per year. Training topics include environmental BMP's in addition to safety, new construction techniques, etc.... These meetings were most recently held in November of 2021 and May of 2022.</li> <li>• CCDTD Development Review staff conducted preconstruction conferences for 65 projects, 21 of</li> </ul>

	<ul style="list-style-type: none"> <li>• CCDTD offers to the development community (in its Permits Lobby) flyers, brochures, and information on local training events and measures regarding responsible stormwater management, site preservation, recycling, and the reduction of pesticide and herbicide use.</li> <li>• The <i>Erosion Prevention and Sediment Control Planning and Design Manual</i> was developed in coordination with multiple regional jurisdictions. It is available online for contractors, citizens, or others involved with construction activities within the permit area. An additional recommended erosion control document is the DEQ <i>Best Management Practices for Storm Water Discharges Associated with Construction Activities</i>.</li> </ul> <p><b>Measurable Goal:</b> Conduct project-specific training for construction site operators.</p> <p><b>Progress on Measurable Goals:</b> Goal attained</p>		<p>which were in the MS4 permit area.</p>
<p><b>5: Conduct Procedures for Site Plan Review and Require Erosion Controls</b></p>	<p><b>Responsible for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> The County is provided the authority to require erosion control through the County’s Zoning and Development Ordinance (ZDO) Section 1008 – <i>Storm Drainage</i>. All reviews are conducted in accordance with the <i>Clackamas County Roadway Standards</i> which recently adopted by reference, with minor provisions, the Districts’ <i>Surface Water Management Rules and Regulations</i>. These regulations require submittal of an erosion prevention and sediment control (EPSC) plan containing structural and/or non-structural BMPs to be constructed or used concurrently with land development. Maintenance of all erosion control measures pursuant to an approved plan is the applicant’s responsibility.</p> <p>The <i>Erosion Prevention and Sediment Control Planning and Design Manual</i> (revised in 2009) is part of the EPSC requirements and is also suggested as an educational resource to the development community for preparation of plans for erosion prevention and sediment control. In addition to erosion prevention and sediment control, the document also includes measures related to good house-keeping and addressing non-stormwater related waste. The DEQ <i>Best Management Practices for Storm Water Discharges Associated with Construction Activities</i> guidance document is also recommended.</p>	<p>(1) Annual number of site plan reviews and approved plans.</p>	<p>Sixty-five (65) development permits reviewed by CCDTD County-wide, twenty-one (21) of which were within the MS4 permit area.</p>

	<p><b>Measurable Goal:</b> Review applicable plans and assess the need for structural and non-structural erosion and sediment control BMPs submitted as part of the building permit process.</p> <p><b>Progress on Measurable Goal:</b> Goal attained. Review of plans and assessment of the need for structural and non-structural erosion and sediment controls are completed by our partner agencies within the permitted area (OLWS and WES).</p>		
<p><b>6: Conduct Enforcement Activities</b></p>	<p><b>Responsible for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> Enforcement for noncompliance of approved erosion prevention and sediment control (EPSC) measures for disturbances of new construction or redevelopment projects are supplemented by Clackamas County through the CCDTD's Code Enforcement Section, allowed through General County Codes.</p> <p>To provide a more expeditious cessation and remediation of noncompliant activities, CCDTD staff would likely inform Oregon State Police (503-731-3020), CCSD#1, SWMACC, DEQ, Department of State Lands, US Army Corps of Engineers, etc. as appropriate and applicable.</p> <p><b>Measurable Goal:</b> Enforce noncompliance of applicable approved erosion prevention and sediment control measures per the allowed measures provided through the General County Code.</p> <p><b>Progress on Measurable Goal:</b> Goal attained. Enforcement for noncompliant EPSC work in the Water Environment Services service area is typically provided by WES, and enforcement for noncompliant EPSC work in OLWS is typically provided by OLWS, so CCDTD does not need to "Enforce noncompliance of applicable approved erosion prevention and sediment control measures..." very often. Enforcement actions by CCDTD are typically in relation to newly constructed driveways and/or site grading.</p>	<p>(1) Annual number of enforcement actions.</p>	<p>(1) One (1) enforcement action within the MS4 permit area.</p>
<p><b>7: Conduct Site Inspections</b></p>	<p><b>Responsible for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> Clackamas County's Engineering and Transportation Maintenance Divisions conduct regular and ongoing site inspections as a</p>	<p>(1) Annual number of CIP projects inspected for</p>	<p>(1) Five (5)</p> <ul style="list-style-type: none"> <li>• <u>D Street Improvements Project</u></li> </ul>



	<p>component of roadway CIP and rehabilitation project construction within the county road rights of way. These site inspections include conformance with the approved erosion control plans; recommendations for improvements are provided when warranted.</p> <p><b>Measurable Goals:</b></p> <ul style="list-style-type: none"> <li>• MG#1: During construction inspections of roadway CIP and rehabilitation projects, ensure conformance with the approved erosion control and sediment prevention plans.</li> <li>• MG#2: Conduct a minimum of one unscheduled inspection at all active construction sites.</li> </ul> <p><b>Progress on Measurable Goals:</b></p> <ul style="list-style-type: none"> <li>• MG#1: Attained. Five (5) projects monitored and inspected in 2021-2022</li> <li>• MG#2: Attained</li> </ul>	<p>erosion prevention and sediment control plan compliance.</p>	<ul style="list-style-type: none"> <li>• CRC Mobility Improvements Project</li> <li>• South End Road Slide Repair Project</li> <li>• SE Sunnyside Road at SE 122nd Avenue ADA Improvements Project</li> <li>• Fuller/Causey Crosswalk Improvements</li> </ul>
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**SWMP Component #4  
Education and Outreach**

**TABLE 4 –Education and Outreach BMPs**

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2021-2022
<p><b>8: Publish and Distribute Newsletters</b></p>	<p><b>Responsible for Implementation:</b> CCDTD and Clackamas County Department of Public and Government Affairs</p> <p><b>BMP Description:</b> The county collaborates in the preparation and publication of two newsletters annually:</p> <ul style="list-style-type: none"> <li>• <i>Trash Talks</i> addresses safe recycling and disposal of hazardous materials, green alternatives for hazardous materials, and general solid waste issues. This effort is coordinated with Metro and other agencies across the metropolitan area. Published twice a year, <i>Trash Talks</i> is sent to every household and postal address in Clackamas County. Each issue includes public education materials on such topics as proper disposal of oil and toxic materials, the responsible use of pesticides and herbicides, etc. The CCDTD Code Compliance Section also responds to inquiries by the public to provide information regarding recycling and the disposal of hazardous materials.</li> <li>• Clackamas County Public and Government Affairs develops and distributes the newsletter, <i>Citizen News</i>. Published quarterly, <i>Citizen News</i> incorporates articles that inform the public and encourage behavioral changes to improve water quality.</li> <li>• Also, the Clackamas County Department of Public and Government Affairs collaborates with the Clackamas County Department of Emergency Management to develop and distribute annual <i>Emergency Preparedness Calendars</i>. These calendars are designed as an information source and provide approximately 65 helpful emergency and non-emergency contacts and telephone numbers, broken into five categories: <ul style="list-style-type: none"> <li>▪ <b>Emergencies</b> – including non-emergency contacts.</li> <li>▪ <b>Clackamas County</b> – including service-oriented contacts including Road Maintenance, WES, Emergency Management, Sustainability and Code Compliance Sections, Building Services, etc.</li> </ul> </li> </ul>	<p>(1) Annual number of stormwater quality-related articles published in <i>Trash Talk</i> and/or <i>Citizen News</i>.</p>	<p>(1) In coordination with WES, Clackamas County published seven (7) stormwater quality related articles in <i>ClackCo Quarterly</i> (previously titled <i>Citizen News</i>) and/or <i>Trash Talk</i>. Additionally, there were four (4) Clackamas County Press Releases that were stormwater quality-related.</p> <p align="center">Article and press release dates and titles provided upon request.</p>

	<ul style="list-style-type: none"> <li>▪ <b>Helpful Contacts</b> – including Abandoned Vehicles, Dump Stoppers, Household Hazardous Waste Collection, Natural Resource Conservation Service USDA Service Center, Poison Hotline, etc.</li> <li>▪ <b>Fire Districts</b> – including local, regional, and forestry contacts.</li> <li>▪ <b>Helpful Websites</b> – including DEQ, Metro, Oregon Dept. of Fish and Wildlife, SOLV, etc.</li> </ul> <p><b>Measurable Goal:</b> CCDTD will facilitate the inclusion of at least three articles each year with a storm water quality-related message to be published in the local newsletters, <i>Trash Talks</i> and <i>Citizen News</i>.</p> <p><b>Progress on Measurable Goal:</b> Exceeded</p>		
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<p><b>9: Continue Cooperative Educational and Outreach Efforts with Others</b></p>	<p><b>Responsible for Implementation:</b> CCDTD and others</p> <p><b>BMP Description:</b> The following is one of the CCDTD programs that facilitates education and outreach:</p> <ul style="list-style-type: none"> <li>• CCDTD Engineering Division works closely and partners annually with watershed councils in the county to facilitate development of grant applications and, if awarded, to provide in-kind technical and construction services for projects that jointly improve county-maintained roadway systems and anadromous fish passage and habitat.</li> </ul> <p>The following are other programs and efforts within the county that facilitate education and outreach:</p> <ul style="list-style-type: none"> <li>• CCDTDs Office of Sustainability supports and coordinates sustainability activities within and throughout Clackamas County, and is a resource for the community. It also provides introductory training on sustainability to all employees. Several policies and plans inform the county’s approach to sustainability: <ul style="list-style-type: none"> <li>▪ Resolution for a Sustainable Clackamas County</li> <li>▪ Action Plan for a Sustainable Clackamas County</li> <li>▪ Clackamas County Policy on Sustainable Practices</li> <li>▪ Clackamas County Administrative Procedures for Implementing the Policy on Sustainable Practices</li> </ul> </li> </ul>	<p>(1) Annual number, type, and value of grant applications prepared with partners.</p> <p>(2) Annual number, type, and value of grants awarded with partners.</p>	<ul style="list-style-type: none"> <li>- In June of 2021, Clackamas County and the Molalla River Watch submitted an OWEB Restoration grant application for a very important project on Woodcock Creek in the Molalla River Basin. This project was successful and has been awarded approximately \$359,000 in OWEB Restoration grant funds. To be constructed in 2023.</li> <li>- Clackamas County has partnered with the Johnson Creek Watershed Council on a \$300,000 IJJA/NOAA grant funding request to restore fish-passage to a culvert under a County-maintained roadway in Boring, OR.</li> <li>- Clackamas County has partnered with the ODFW,</li> </ul>
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	<ul style="list-style-type: none"> <li>• As partners, CCSD#1, SWMACC and CCDTD continue to coordinate efforts to meet the storm water management requirements for the county. CCSD#1 and SWMACC provide the vast majority of educational and outreach efforts for the county for the high priority areas. CCDTD will continue to support the Districts to facilitate effective educational and outreach efforts and be an active participant in the County’s Storm Water Management Steering Committee.</li> <li>• The Clackamas County Soil and Water Conservation District (SWCD) focuses on making the county a place where communities, environments and economy thrive together. The SWCD provides services to landowners, organizations, agencies and local communities within Clackamas County. These services take the form of: technical assistance to individual landowners; projects involving multiple landowners and partners; income generating enterprises; and research and development activities that are replicable by other individuals and organizations at varying geographic scales.</li> <li>• CCDTD offers to the development community (in its permits lobby) flyers, brochures, and information on local training events and measures regarding responsible stormwater management, site preservation, recycling, and the reduction of pesticide and herbicide use.</li> </ul> <p><b>Measurable Goal:</b> Continue partnering with local watershed councils to apply for grants that jointly benefit county roadway infrastructure and anadromous fish passage and habitat.</p> <p><b>Progress on Measurable Goal:</b> Clackamas County continues to seek partnership opportunities with our various watershed councils which would benefit County infrastructure as well as to improve anadromous fish passage and habitat. While there has not been a lot of partnered grant activity within the MS4 permit area, there is certainly a good amount of collaboration taking place in terms of finding funding for projects which will benefit County infrastructure as well as to improve anadromous fish passage and habitat.</p>		<p>Portland Water Bureau, Forest Service and the Freshwater Trust to acquire approximately \$900,000 in grant funding to restore fish-passage to a culvert under a County-maintained roadway in Rhododendron, OR. \$550,000 has already been secured. This project is #1 on the North Willamette Watershed District priority list.</p> <p>2. One project awarded approximately \$359,000 in OWEB Restoration grant funds in 2021-2022</p>
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<p><b>10: Participate in a Public Education Effectiveness Evaluation</b></p>	<p><b>Responsible for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> As partners, Water Environment Services, OLWS and CCDTD continue to coordinate efforts to meet the stormwater management requirements for the County. Water Environment Services and OLWS provide the vast majority of educational and outreach efforts for the geographic areas which pertain to CCDTD's MS4 SWMP. CCSD#1, SWMACC's SWMPs include a BMP to participate in a public education effectiveness evaluation (Schedule B(5)B), which was due by 7-1-15. CCDTD will review results of Water Environment Services and OLWS's evaluation to identify whether results warrant changes to CCDTD's SWMP.</p> <p><b>Measurable Goal:</b> Review outcomes of the public education effectiveness evaluations and identify whether adaptive management changes to the SWMP are warranted based on results.</p> <p><b>Progress on Measurable Goal:</b> CCDTD has reviewed the results of the Public Education Effectiveness Evaluation which WES conducted on behalf of CCSD#1 and the SWMACC, in addition to the evaluation used by OLWS, commissioned through Oregon ACWA. CCDTD's opinion at this time is that these evaluations are not conclusive and do not provide to us any new or conclusive information that would prompt any changes in regards to the way we conduct our public education and outreach. CCDTD, CCSD#1, SWMACC and the cities of Happy Valley and Rivergrove have created a new Shared SWMP, which will be submitted to the DEQ no later than December 1, 2022. Through the process of creating this shared SWMP, several meetings were held to evaluate our SWMP BMP's. When the Shared SWMP is implemented, we expect that some changes will take place in the way that we conduct our public education practices. At this time we are awaiting comments and/or approval.</p>	<p>(1) Report on review and response to SWMACC's, OLWS's, and CCSD#1's public education effectiveness evaluations.</p>	<p>(1) CCDTD previously reviewed the results of the Public Education Effectiveness Evaluations conducted by WES &amp; OLWS and have concluded that, based on the results, these evaluations do not provide information that would change how CCDTD conducts public education and outreach.</p>
<p><b>11: Training for Employees</b></p>	<p><b>Responsible Department:</b> CCDTD</p> <p><b>BMP Description:</b> A variety of storm water management training opportunities are available to staff in the CCDTD Engineering and Transportation Maintenance Divisions that are involved in MS4-related activities. Training opportunities are available through agencies, trade associations, educational groups, and partners (such as Water Environment Services) involved with a broad range of water quality-related issues, including but not limited to:</p> <ul style="list-style-type: none"> <li>• Oregon Association of Clean Water Agencies conferences</li> <li>• ODOT Local Agency Training</li> <li>• American Society of Civil Engineers</li> </ul>	<p>(1) Annual number of staff in Engineering and Transportation Maintenance Divisions that receive stormwater management-related training. List type of training.</p>	<p>(1)</p> <ul style="list-style-type: none"> <li>- NWETC- Certified Erosion &amp; Sediment Control Lead (CESCL) Training (April 2022) : 4 Employees</li> <li>- Mid-Willamette Erosion Control Summit (January 2022): 4 Employees</li> <li>- APWA - 2022 Preventative Maintenance for Roadway Surfaces- (April 2022) : 2 employees</li> </ul>

	<p>Such training is provided based on need and availability.</p> <p><b>Measurable Goal:</b> Attend relevant stormwater management related training based on need and availability.</p> <p><b>Progress on Measurable Goal:</b> Attained</p>		<p>- APWA -Street Maintenance &amp; Collection Systems – (March 2022): 1 employee</p>
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**SWMP Component #5  
Public Involvement and Participation**

**TABLE 5 –Public Involvement and Participation**

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2021-2022
<p><b>12: Provide for Public Participation with SWMP Submittal</b></p>	<p><b>Responsible Department:</b> CCDTD</p> <p><b>BMP Description:</b> Schedule A.4.e of the MS4 NPDES permit requires the opportunity for public participation in the development and modification of the CCDTD Stormwater Management Plan (SWMP). TMDL pollutant load reduction benchmark development is conducted by CCSD#1 and SWMACC within their respective Districts; it is not being conducted for the low priority areas outside of the Districts.</p> <p>Prior to submittal, CCDTD will provide the public with an opportunity to comment on the revised draft SWMP for a minimum of 30 days. Comments on the document will be collected and considered.</p> <p><b>Measurable Goal:</b> Provide for public participation with the SWMP prior to the permit renewal application deadline.</p> <p><b>Progress on Measurable Goal:</b> Attained. The opportunity for public participation and review of the Shared SWMP was provided during the month of September, 2022.</p>	<p align="center">N/A</p>	<p>Clackamas County DTD, WES and the cities of Happy Valley and Rivergrove will submit a revised, Shared SWMP to the DEQ no later than December 1, 2022. A public review and comment period was provided for the draft Shared SWMP during September of 2022.</p>

**SWMP Component #6  
Post-Construction Site Runoff**

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2021-2022
<p><b>13: Planning Procedures for New Public CIP Development</b></p>	<p><b>Responsible for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> This BMP addresses the planning procedures for developing, implementing, and tracking controls to reduce the discharge of pollutants from storm sewers collecting runoff from proposed CCDTD transportation capital improvement program (CIP) projects.</p> <p>CCDTD constructs new water quality structural controls and treatment facilities wherever feasible as a component of its new development and significant rehabilitation projects, given the funding source and budget available, state and federal requirements, and CCDTD policy (CCDTD recently adopted, with minor provisions, the Surface Water Management Rules and Regulations of CCSD#1 and SWMACC). As Low Impact Development (LID) approaches to address stormwater management become more prevalent, proven, and deemed acceptable by project constituents (including state and federal agencies), it is anticipated that incorporating the planning, design, and implementation of these facilities into the CCDTD CIP projects will become standard practice.</p> <p>The location of these stormwater management facilities are currently identified in a database and maintained along with other roadway-related structures.</p> <p><b>Measurable Goals:</b></p> <ul style="list-style-type: none"> <li>• MG#1: Actively participate in the planning, design, and implementation of stormwater quality treatment for new and significant rehabilitation of roadway CIP projects.</li> <li>• MG#2: Track the location, type, and drainage area of new roadway CIP project water quality facilities.</li> </ul> <p><b>Progress on Measurable Goals:</b> Attained. Clackamas County DTD will continue to include and install these facilities when and where feasible.</p>	<p>(1) Number, type, location, and drainage area of flow control, water quality treatment or infiltration facilities installed.</p> <p>(2) Map the location of the applicable stormwater management facilities.</p>	<p>(1) CRC Mobility Improvements Project</p> <p>- (7) Water Quality Manholes and (1) Vegetated Infiltration Swale, treating a combined 18.4 acres.</p>

TABLE 6 – Post-Construction Site Runoff

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2021-2022
<p><b>14: Update Procedures for New Development</b></p>	<p><b>Responsible for Implementation:</b> CCDTD</p> <p><b>Summary of BMP Description:</b> To encourage and support sustainable land use practices throughout the county, CCDTD staff are proposing a first phase of amendments to County land use codes that would result in more sustainable development and promote innovative concepts; low impact development (LID) approaches are included. The standards would apply to new development applications and would be administered throughout the current development review process.</p> <p>The <i>Clackamas County Roadway Standards</i> adopt by reference, with minor provisions, the CCSD#1 stormwater standards. CCSD#1 embarked on a process to revise and update their development standards in late 2009; several CCDTD staff actively participated in this effort. Updated standards, if adopted and placed into effect, are expected to include new thresholds for meeting standards and increased emphasis on infiltration, on-site retention, and the duration of peak flows in order to address impacts associated with hydro-modification. In addition, the design storm is being evaluated to ensure it will address the capture and treatment of 80% of average annual runoff.</p> <p><b>Measurable Goals:</b></p> <ul style="list-style-type: none"> <li>• MG#1: Adopt amendments to county land use codes facilitating sustainable development.</li> <li>• MG#2: Facilitate development of the CCSD#1 standards revisions through active participation in the Stormwater Management Steering Committee, and if acceptable, create and implement a process to adopt said revisions by reference to the county <i>Roadway Standards</i>.</li> </ul> <p><b>Progress on Measurable Goals:</b></p> <ul style="list-style-type: none"> <li>• MG#1: ZDO-280 and ZDO-282 amendments have been adopted</li> <li>• MG#2: CCDTD has continued to be active in the Watershed Protection monthly meetings in 2021-2022. These meetings have the same intent and purpose as the original Stormwater Management Steering Committee meetings and are well-attended. CCDTD staff will continue to review revisions made to WES' Stormwater Standards and will consider their inclusion in CCDTD's Roadway Standards. Some revisions to the Stormwater Standards are anticipated in 2022-2023, pending approval by the County Board of Commissioners.</li> </ul>	<ol style="list-style-type: none"> <li>(1) Track status of county zoning amendments.</li> <li>(2) Adopt county zoning amendments.</li> <li>(3) Track status of CCSD#1 standards revision.</li> <li>(4) Adopt CCSD#1 standards revision by reference to the county <i>Roadway Standards</i></li> </ol>	<p>(1 and 2)</p> <ul style="list-style-type: none"> <li>•ZDO-280 is a package of legislative text amendments to the Clackamas County Comprehensive Plan and Zoning and Development Ordinance (ZDO). The amendments respond to a directive in the adopted Long-Range Planning Work Program for 2019-2021. Per the Work Program, this project is intended to make relatively minor changes to County land use regulations that are necessary to comply with new state and federal mandates, clarify existing language, correct errors, and adopt optional provisions that require only minimal staff analysis.</li> <li>•ZDO-282 primarily contains amendments that are needed to comply with House Bill 2001 (HB2001), a bill from the 2019 Oregon Legislature that mandates jurisdictions, including Clackamas County, allow people to build middle housing -- duplexes, triplexes, quadplexes, cottage clusters, and townhomes -- in urban areas zoned for single-family detached housing. In unincorporated Clackamas County, these requirements will apply to properties in urban zoning districts R-5, R-7, R-8.5, R-10, R-15, R-20, R-30, VR-5/7, and VR-4/5.</li> </ul> <p>(3) CCDTD has continued to be involved in the CCSD#1 (now known as WES) Standards revision process. When changes are adopted to the Standards, CCDTD expects to implement them. There are no revisions to report during this reporting period.</p>



			(4) The current Clackamas County Roadway Standards has adopted certain chapters of the CCSD#1 (now known as WES) Standards. The WES Standards are referred to in Chapter 4 of the Clackamas County Roadway Standards.
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**SWMP Component #7  
Pollution Prevention for Municipal Operations**

**TABLE 7 – Pollution Prevention for Municipal Operations BMPs**

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2021-2022
<b>15: County Roadway Operations and Maintenance Program</b>	<p><b>Responsibility for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> Designated Clackamas County road rights-of-way within the UGB incorporate stormwater conveyance system components including ditches, inlets, storm sewer pipelines, catch basins, and culverts. CCDTD’s Transportation Maintenance Division oversees the operation and maintenance of this system on a daily basis.</p> <p>CCDTDs Transportation Maintenance Division follows with provisions the Oregon Department of Transportation’s <i>Routine Road Maintenance, Water Quality and Habitat Guide, Best Management Practices</i>, which was revised in 2020 (ODOT Guide), for work within the county roads rights-of-way. National Marine Fisheries Service (NMFS) agreed to have this set of activities described in Limit 10(i) under section 4(d) of the Endangered Species Act (ESA) as exempt from ESA take provisions when its best management practices (BMPs) are used. The stated stormwater management goal is “to reduce or eliminate</p>	<p>(1) Formally adopt the 2009 ODOT Guide by January 1, 2013.</p> <p>(2) Number of miles of ditches cleaned.</p> <p>(3) Number of public catch basins cleaned and volume and/or weight of debris captured.</p> <p>(4) Number of miles of arterial streets</p>	<p>(1) The current ODOT BMP guide is the 2020 Revised edition which is being implemented by CCDTD.</p> <p>(2) CCDTD cleaned 36.32 miles of ditches, county-wide. 9.25 of those miles were within the MS4 permit area.</p> <p>(3) 145 catch basins were cleaned county-wide. 109 of those were within the MS4 permit area.</p> <ul style="list-style-type: none"> <li>81.19 cubic yards removed county-wide. 53.95 cubic yards of material removed within the MS4 permit area.</li> </ul>

	<p><i>pollutants of concern, to the maximum extent practicable, from entering the waters of the state.”</i> Typical maintenance activities include:</p> <ul style="list-style-type: none"> <li>• Ditch cleaning – Ditches are cleaned on a prioritized basis depending largely on upcoming scheduled road work.</li> <li>• Catch-basin cleaning – Vactor waste is taken to a decant facility (near SE Evelyn St. and Jennifer St.) where liquid waste is drained into the CCSD#1 sanitary sewer system.</li> <li>• Street sweeping – Major arterial curbed county roadways are swept on a regular basis (depending on traffic volumes, presence of deciduous trees, season, etc.). Two street sweepers are in continual use on the estimated 400 miles of subject roadways. Sweeping is also conducted to collect sand that has been applied to address icy roadways.</li> </ul> <p>Hazardous material collected during maintenance activities is properly disposed of in approved areas.</p> <p><b>Measurable Goals</b></p> <ul style="list-style-type: none"> <li>• MG#1: Formally adopt the 2009 ODOT Guide by January 1, 2013.</li> <li>• MG#2: Track the county roadway operations and maintenance program.</li> </ul> <p><b>Progress on Measurable Goals:</b></p> <ul style="list-style-type: none"> <li>• MG#1: Attained. The County has adopted the 2009 ODOT Guide and is currently using the 2020 Revised edition of the ODOT guide.</li> <li>• MG#2: Attained. The County continues to track all County roadway operations and the maintenance program as required and as demonstrated in the Tracking Measures Response.</li> </ul>	<p>swept and volume and/or weight of debris captured.</p>	<ul style="list-style-type: none"> <li>• Additionally, OLWS cleaned 99 catch basins, removing 16.506 cubic yards, within the OLWS service district.</li> </ul> <p>(4) 871 curb/ shoulder miles swept on arterial roads county-wide. 716 of those miles were within the MS4 permit area.</p> <ul style="list-style-type: none"> <li>• 727 cubic yards of material removed, county-wide. 531 cubic yards removed within the MS4 permit area.</li> </ul>
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CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2021-2022
<p><b>16: Pesticide, Herbicide and Fertilizer Programs</b></p>	<p><b>Responsibility for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> CCDTD’s Transportation Maintenance Division and Parks staff implements a pesticide, herbicide and fertilizer program within the county for their respective facilities. They oversee an Integrated Vegetation Management Plan (IVM) that addresses proper vegetation removal, mechanical use, and appropriate chemical application. Chemical products are applied by trained personnel only within specific areas and are used in a manner consistent with product labeling. Spot spraying is used along road shoulders and for foliage in the road rights of way. At least one trained applicator is licensed, and is recertified annually.</p> <p>CCDTD is sensitive to “no spraying” requests by the public and maintains offset areas limiting spraying near waterways and riparian areas.</p> <p>The IVM program is slated to be reviewed and updated in the near future; opportunities to minimize and avoid the use of chemicals will be a major consideration.</p> <p><b>Measurable Goal:</b></p> <ul style="list-style-type: none"> <li>• MG#1: Track the existing CCDTD IVM program.</li> <li>• MG#2: Review the existing IVM program and provide recommendations to minimize the use of chemicals by January 1, 2013.</li> </ul> <p><b>Progress on Measurable Goals:</b> Both attained.</p>	<p>(1) Track policy and/or procedural changes associated with IVM program.</p> <p>(2) Track quantity of herbicide use per zip code and/or sub-watershed basin.</p>	<p>(1) CCDTD tracks IVM program policy and procedural changes.</p> <p>(2) See Appendix A</p>

**SWMP Component #8**

**Structural Stormwater Facility Operations and Maintenance**

**TABLE 8 – Structural Stormwater Facilities Operations and Maintenance BMPs**

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2021-2022
<p><b>17: Maintenance of Structural Controls</b></p>	<p><b>Responsibility for Implementation:</b> CCDTD</p> <p><b>BMP Description:</b> CCDTD constructs new public water quality structural controls and treatment facilities wherever feasible as a component of the capital improvement program (CIP) development and significant rehabilitation projects.</p> <p>Public stormwater management facilities located within county transportation rights of way are identified in a database maintained by the Transportation Maintenance Division. Conveyance components may include culverts, storm sewer lines and inlets. Stormwater treatment components may include aboveground stormwater facilities, sedimentation manholes, and underground proprietary pollution control systems.</p> <p>These public stormwater facilities are maintained along with other roadway-related structures (see BMP #15). Facilities are inspected for indications of illegal dumping and disposal and any damaged or nonfunctioning components. Maintenance is often conducted during inspection. The Districts addresses maintenance of private water quality facilities in the high priority areas.</p> <p><b>Measureable Goals:</b></p> <ul style="list-style-type: none"> <li>• MG#1: Continue to verify that CIP stormwater structural facilities and controls are inventoried, mapped, inspected, operated and maintained.</li> <li>• MG#2: By January 1, 2013, develop a strategy that guides the long-term maintenance and management of CIP stormwater structural facilities and controls.</li> </ul> <p><b>Progress on Measurable Goals:</b></p> <ul style="list-style-type: none"> <li>• MG#1: Clackamas County continues to inventory new and/or newly discovered facilities. The approval and implementation of the new Shared SWMP will prompt us to further discuss inspection, operation and maintenance plans/responsibilities with our SWMP partners.</li> <li>• MG#2: We are currently in the process of developing this strategic plan. The approval and implementation of the new Shared SWMP will prompt us to work with our SWMP partners in the effort to develop an agreed upon strategy to guide the long-term maintenance and management of stormwater facilities.</li> </ul>	<p>(1) Develop long-term structural control maintenance and management strategy</p>	<p>The Clackamas County CIP group continues to work with staff responsible for asset management as well as with the Transportation Maintenance Division to ensure that all new stormwater structural facilities and controls are inventoried, mapped, inspected, operated and maintained. In addition, a revised SWMP (submitted no later than December 1, 2022), whose implementation will be shared among CCDTD, WES and the cities of Happy Valley and Rivergrove, includes BMPs that will address long-term structural control, maintenance and management strategy..</p>

### 3.0 PROGRAM EXPENDITURES AND FUNDING SOURCES

The primary funding source for DTD activities related to this permit is Clackamas County Road Fund. The majority of the Clackamas County road system is outside the Urban Growth Boundary. None of the budget expenses include overhead charges or projections. Total program expense exceeds budgeted expense as materials and equipment capitalized in previous years are expended in implementation of the activity. The information provided below is required by permit schedule B(5)(E).

TABLE 9: PROGRAM EXPENDITURES AND FUNDING SOURCES FOR MS4 PERMIT

Updated 09/26/2022

<b>Program</b>	<b>2021/2022 Total Expenditures<sup>1</sup></b>	<b>2021/2022 Expenditures within the Urban Growth Boundary (UGB)<sup>2</sup></b>	<b>2022/2023 Anticipated Expenditures within the Urban Growth Boundary (UGB)<sup>3</sup></b>
Storm Sewers	\$919,571	\$597,553	\$615,480
Ditch Maintenance	\$544,787	\$136,789	\$140,893
Hydroseeding	\$7,205	\$571	\$588
Street Sweeping	\$402,074	\$303,834	\$312,949
<b>Grand Total</b>	<b>\$1,873,637</b>	<b>\$1,038,747</b>	<b>\$1,069,910</b>

**Funding source is Clackamas County Road Fund.**

**1** Data source is the DTD Job Cost System and does not include overhead charges.

**2** Derived from the DTD Job Cost System and Clackamas County's Metro UGB boundary in ArcGIS. It does not include overhead charges.

**3** 3% increase added to 2022/2023 expenditures in UGB.

Explanation of activities:

Culvert/Storm Sewers: maintenance and cleaning of catch basins and storm systems.

Ditch Maintenance: maintenance and erosion control of roadside ditches.

Street Sweeping: preventative maintenance sweeping of curbed streets to improve water quality.

Hydroseeding: planting of seed and mulch on road shoulder for erosion control.

Water Quality Facilities: maintenance and cleaning of water quality facilities such as detention ponds, rain gardens and swales.

## **4.0 ADDITIONAL REPORTING REQUIREMENTS**

This section addresses the remaining MS4 permit annual reporting requirements.

### **4.1 Adaptive Management**

BMP implementation and environmental monitoring data analysis has been performed by Clackamas County and partnering co-permittees throughout this reporting period. The effort to adaptively manage BMP implementation per permit schedule D(10)a and as required in permit section B(5)(c), in light of measurable goals in the County's SWMP, is on track. Clackamas County DTD, WES and the cities of Happy Valley and Rivergrove have created and submitted to the DEQ a Shared SWMP as a component of the MS4 permit renewal application package. The adaptive management process generated several improvements to the co-permittees' stormwater management. With the issuance of a new MS4 permit in September of 2021, Clackamas County and our partner agencies have revised the 2017 SWMP and will be submitting our most recent version of the Shared SWMP no later than December 1, 2022, to assure compliance with this new MS4 permit.

### **4.2 Proposed Changes to SWMP**

Permit Schedule B(5)(d) requests that any proposed changes to SWMP program elements that are designed to reduce TMDL pollutants to the MEP be included in the applicable annual report. While there are no changes to the existing SWMP, CCDTD has recently worked with CCSD#1, SWMACC, and the cities of Happy Valley and Rivergrove to create a new, shared SWMP which is intended to comply with the new MS4 permit, issued in September of 2021. This new SWMP will include several improvements, including updated BMP's and tracking measures as well as clarity on the delineation of MS4 related responsibilities among SWMP

partners. Clackamas County and our partner agencies will be submitting our most recent version of the revised SWMP no later than December 1, 2022, to assure compliance with this new MS4 permit.

#### **4.3 Monitoring Data and Monitoring Plan [Schedule B(5)(f), (g), and (h)]**

DTD does not perform monitoring of surface/stormwater quality. See the annual reports by OLWS and Water Environment Services for a summary of monitoring program results in those geographic areas. At this time, DTD is not proposing that modifications be made to these co-permittees' monitoring plans. See Table 2, BMP #2 for annual data related to illicit discharges.

#### **4.4 Development, Planning, and Land Use Changes [Schedule B(5)(i) and (j)]**

Land use did not significantly change within the CCDTD permit area or within the adjacent UGB expansion areas over the course of the 2021-2022 reporting period. CCDTD approved the following Land Use changes: 27 new land partitions, 3 new land subdivisions and 3 zone changes, one from Medium Density Residential "MR-1" to High Density Residential "HDR", one from Urban Low Density residential "R-10" to Medium Density Residential "MR-1" and one to establish a new Clackamas County Historic Landmark.

No UGB expansion occurred in 2021-2022 nor is it expected to occur in 2022-2023.

Post-construction permitting activities that occurred within these areas during the reporting year were reviewed by our partner agencies; the role of CCDTD is to ensure that these reviews are completed. CCDTD completed review on sixty-five (65) Development permits, county-wide. Twenty-one (21) of those were within the permit area; OLWS and WES report the total new and impervious surface area from these developments.

#### **4.5 Public Involvement and Participation [Schedule A(4)(e)]**

A public participation approach that provides opportunities for the public to effectively participate in the development, implementation, and modification of the co-permittee's stormwater management program shall be provided. The approach includes provisions for receiving and considering public comments on this annual report. A draft version of this 2021-2022 annual report was made available to the public on CCDTD's website and available by hard copy. Public comment opened on Friday, October 7 and ended at 11 p.m., Sunday, October 23.

#### **4.6 Other MS4 permit requirements**

The MS4 Permit's Schedule A(5) required that a Hydromodification Assessment report be submitted to the Department of Environmental Quality (DEQ) by July 1, 2015. The MS4 Permit's Schedule A(6) required that a Stormwater Retrofit Plan be submitted to the DEQ by July 1, 2015. CCDTD works in partnership with the OLWS and WES to implement the stormwater management program which is mandated by the MS4 Permit, and CCDTD's portion of the partnership does not include: I) the creation of these work products, and II) compliance with Schedule A(6)(c), which pertains to the identification, etc. of a stormwater quality improvement project. Please see

the Hydromodification Assessment reports and Stormwater Retrofit Plans which were submitted by the OLWS and WES for more information about these portions of the MS4 permit.

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APPENDIX A

**Pesticides used in the UGB, 2021-2022**

<b>Description</b>	<b>UOM</b>	<b>EPA Reg. No.</b>	<b>Total Estimated Quantity</b>
CAPSTONE	QT	62719-572	15.92
ESCORT XP (VM)	OZ	432-1549	34.60
ESPLANADE 200 SC	PT	432-1516	10.84
PATHFINDER II	PT	62719-176	4.00
RODEO	QT	62719-324	1.75
ROUNDUP PRO MAX	QT	524-579	33.74
TERRAVUE	OZ	62719-738	98.68

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