

**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, 2017 – June 30, 2018**



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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.

Dan Johnson, Director
Clackamas County
Department of Transportation and Development

Date

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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 Clackamas County Service District No. 1 (CCSD#1), the Surface Water Management Agency of Clackamas County (SWMACC), Oak Lodge Sanitary District, 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.

In order to address the County's MS4 Permit requirements, DTD works in collaboration with Clackamas County Water Environment Services (WES), who administers CCSD#1 and SWMACC, the Oak Lodge Sanitary District (OLSD), and with most of the other co-permittees.

The October 7, 2010 Clackamas County DTD Stormwater Management Plan (SWMP) is the SWMP which was in effect during the 2016-2017 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 CCSD#1 and OLSD, but several hundred acres are in SWMACC, and smaller areas exist in some cities where County-owned/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

Annual Report Submittal Requirements:	Section where the Requirement is Addressed
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 2014-2015 year and those anticipated in 2016-2017.	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 OLSD, CCSD#1, SWMACC, 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-owned 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 2017-2018 annual report aligns with the format which is found in Schedule A of the current MS4 permit (renewed on March 16, 2012).

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 2017-2018 for each goal and present tracking measures along with the data used to track those measures.

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Illicit Discharge Detection and Elimination

TABLE 2 – Illicit Discharge Detection and Elimination BMPs

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2017-2018
<p>1: Conduct Dry Weather Inspections</p>	<p>Responsible for Implementation: CCDTD</p> <p>BMP Description: 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>Measurable Goal: 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>Progress on Measurable Goal: 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 (formerly, SWMACC and CCSD#1) and OLSD 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 11 are in OLSD.</p> <p>(2) It has been determined that this plan will not be needed, for CCDTD expects that WES (formerly, SWMACC and CCSD#1) and OLSD will be conducting the necessary dry weather screening work in the future.</p>
<p>2: Implement the Spill Response Program</p>	<p>Responsible for Implementation: CCDTD</p> <p>BMP Description: 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 2009 (ODOT Guide), for work within the county road rights of way. DTD is in the final approval stage with National Marine Fisheries Service (NMFS) 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 pollutants of concern, to the maximum extent practicable, from entering the waters of the state.” These activities are compiled in the <i>CCDTD BMPs for Routine Road Maintenance</i> manual.</p> <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"> • Assess the situation for safety considerations. • Stop and contain any spill if appropriate. 	<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 reported to the CCDTD Transportation Maintenance Division within the county road rights of way.</p>	<p>(1) Zero</p> <p>(2) Reported spills: 20 Responded to: 8</p> <ul style="list-style-type: none"> - The remaining 12 spills were handled by private vendor(s), Fire Department(s) or others.

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2017-2018
	<ul style="list-style-type: none"> • Call County hazmat coordinator or environmental staff (including WES) for assistance as needed. • Provide traffic control as appropriate. • Notify Oregon Emergency Response System when applicable: <ul style="list-style-type: none"> ○ <u>Activating OERS:</u> <ul style="list-style-type: none"> ▪ 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. ▪ 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. <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>Measurable Goal: 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>Progress on Measurable Goal: Attained</p>		

<p>3: Legal Authority and Procedures to Respond to Reports of Illicit Discharges</p>	<p>Responsible for Implementation: CCDTD</p> <p>BMP Description: 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"> • Surface Water Management Rules and Regulations for CCSD#1 • Surface Water Management Rules and Regulations for SWMACC • The Oak Lodge Sanitary District's authority • General Clackamas County Code enforced according to the process developed and conducted by CCDTD's Code Enforcement Section. • Clackamas County Roadway Standards • CCDTD BMPs for Routine Road Maintenance Manual <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>MS4 Permit Schedule B(5)(h) 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 OLS and CCSD#1/SWMACC, 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>Measurable Goals:</p> <ul style="list-style-type: none"> • 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.). • MG #2: Follow enforcement response procedures upon identification of illicit discharges as warranted and applicable. <p>Progress on Measurable Goals:</p> <ul style="list-style-type: none"> • MG #1: Not applicable; no known illicit discharges within County road rights-of-way during the reporting period. • MG #2: Goal attained. Zero violations reported. 	<ul style="list-style-type: none"> (1) Status of any applicable regulatory updates or modification. (2) Annual number of reported alleged illicit discharges and un-authorized non-stormwater discharges. 	<ul style="list-style-type: none"> (1) Zoning and Development Ordinance Section 1008 was eliminated from the County's development code. Portions of ZDO 1008 were out of date, were not used and/or were redundant. Instead, Clackamas County is using its Roadway Standards in place of ZDO Section 1008. Language was also added to Section 1006 of the ZDO that references the Roadway Standards. (2) Zero alleged discharges handled by Code Enforcement. (All were on private property)
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**SWMP Component #2
Industrial and Commercial Facilities**

Clackamas County's Department of Transportation & Development (DTD) works in partnership with OLSD, 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: 2017-2018
<p>4: Provide Information/ Training to Construction Site Operators</p>	<p>Responsible for Implementation: CCDTD</p> <p>BMP Description: CCDTD participates in educational and training measures for construction site operators. These activities include the following:</p> <ul style="list-style-type: none"> • 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. • 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. • 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. • 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. 	<p>(1) Annual number of project-specific preconstruction conferences conducted by//for CCDTD Engineering and Transportation Maintenance Divisions.</p>	<p>CCDTD conducted six (6) project specific preconstruction conferences for projects affecting the MS4 permit area:</p> <ul style="list-style-type: none"> • 115th Ave Utility Extension Project • SE 122nd Avenue and 132nd Avenue – Sidewalk Project • Boyer Extension Project • Mcloughlin Street Lighting Project • Hwy 224 Traffic Signal Project at Carver • Kuehn Road Bridge Scour Repair Project

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2017-2018
	<ul style="list-style-type: none"> 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>. <p>Measurable Goal: Conduct project-specific training for construction site operators.</p> <p>Progress on Measurable Goal: Attained</p>		
<p>5: Conduct Procedures for Site Plan Review and Require Erosion Controls</p>	<p>Responsible for Implementation: CCDTD</p> <p>BMP Description: 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>Measurable Goal: 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>Progress on Measurable Goal: Attained. CCDTD partners (OLSD and WES) complete the review of plans and assessment of the need for structural and non-structural erosion and sediment control.</p>	<p>(1) Annual number of site plan reviews and approved plans.</p>	<p>CCDTD reviewed 143 Development permits, County-wide. Fifty-three (53) of those were within the MS4 permit area.</p>

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2017-2018
<p>6: Conduct Enforcement Activities</p>	<p>Responsible for Implementation: CCDTD</p> <p>BMP Description: 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>Measurable Goal: Enforce noncompliance of applicable approved erosion prevention and sediment control measures per the allowed measures provided through the General County Code.</p> <p>Progress on Measurable Goal: Attained. WES provides enforcement for noncompliant EPSC work in area formerly known as SWMACC and in the unincorporated portion of the former CCSD#1, and OLSO typically provides enforcement for noncompliant EPSC work within OLSO. Hence, CCDTD does not need to “Enforce noncompliance of applicable approved erosion prevention and sediment control measures...” often. CCDTD enforcement is typically related to newly constructed driveways and/or site grading.</p>	<p>(1) Annual number of enforcement actions.</p>	<p>Four (4) enforcement actions within the MS4 permit area. Nine (9) enforcement actions County-wide.</p>
<p>7: Conduct Site Inspections</p>	<p>Responsible for Implementation: CCDTD</p> <p>BMP Description: Clackamas County’s Engineering and Transportation Maintenance Divisions conduct regular and ongoing site inspections as a 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>Measurable Goal: During construction inspections of roadway CIP and rehabilitation projects, ensure conformance with the approved erosion control and sediment prevention plans. Conduct a minimum of one unscheduled inspection at all active construction sites.</p> <p>Progress on Measurable Goal: Attained</p>	<p>(1) Annual number of CIP projects inspected for erosion prevention and sediment control plan compliance.</p>	<p>Six (6) projects were inspected on a daily basis from beginning to end of project:</p> <ul style="list-style-type: none"> • 115th Ave Utility Extension Project • SE 122nd Avenue and 132nd Avenue – Sidewalks • Boyer Extension Project • Mcloughlin Street Lighting Project • Hwy 224 Traffic Signal Project at Carver • Kuehn Road Bridge Scour Repair Project

**SWMP Component #4
Education and Outreach**

TABLE 4 –Education and Outreach BMPs

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2017-2018
<p>8: Publish and Distribute Newsletters</p>	<p>Responsible for Implementation: CCDTD and Clackamas County Department of Public and Government Affairs</p> <p>BMP Description: The county collaborates in the preparation and publication of two newsletters annually:</p> <ul style="list-style-type: none"> • <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. • 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. • 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"> ▪ Emergencies – including non-emergency contacts. ▪ Clackamas County – including service-oriented contacts including Road Maintenance, WES, Emergency Management, Sustainability and Code Compliance Sections, Building Services, etc. ▪ Helpful Contacts – including Abandoned Vehicles, Dump Stoppers, Household Hazardous Waste Collection, Natural Resource Conservation Service USDA Service Center, Poison Hotline, etc. ▪ Fire Districts – including local, regional, and forestry contacts. 	<p>(1) Annual number of stormwater quality-related articles published in <i>Trash Talk</i> and/or <i>Citizen News</i>.</p>	<p>Four (4) stormwater quality related articles were published in <i>ClackCo Quarterly</i> and/or <i>Trash Talk</i>. Additionally, there were six (6) Clackamas County Press Releases that were stormwater quality-related.</p>

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2017-2018
	<ul style="list-style-type: none"> ▪ Helpful Websites – including DEQ, Metro, Oregon Dept. of Fish and Wildlife, SOLV, etc. <p>Measurable Goal: 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>Progress on Measurable Goal: Exceeded</p>		

<p>9: Continue Cooperative Educational and Outreach Efforts with Others</p>	<p>Responsible for Implementation: CCDTD and others</p> <p>BMP Description: The following is one of the CCDTD programs that facilitates education and outreach:</p> <ul style="list-style-type: none"> • 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. <p>The following are other programs and efforts within the county that facilitate education and outreach:</p> <ul style="list-style-type: none"> • 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"> ○ Resolution for a Sustainable Clackamas County ○ Action Plan for a Sustainable Clackamas County ○ Clackamas County Policy on Sustainable Practices ○ Clackamas County Administrative Procedures for Implementing the Policy on Sustainable Practices • As partners, WES (formerly, CCSD#1 and SWMACC) and CCDTD continue to coordinate efforts to meet the storm water management requirements for the county. WES provides 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. • 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. • CCDTD offers to the development community (in its permits lobby) flyers, brochures, and information on local training events and measures 	<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>	<p>None during the permit period but Clackamas County continues to strategize with the various watershed councils as well as with ODFW for work in 2018-2019 and beyond. There are four (4) projects in particular:</p> <ul style="list-style-type: none"> • River Road/River Forest Creek Culvert Replacement • Aschoff Road/Clear Creek Culvert Replacement • Barlow Trail Road/Little Joe Creek Culvert Replacement • Rugg Road/Badger Creek Culvert Replacement <p>All four projects present fish-passage barriers and will be constructed to meet fish-passage standards/requirements.</p> <p>Additionally, Clackamas County has a current stockpile of approximately 450 Conifer logs with and without rootwads. CCDTD plans to donate 300 of the 450 logs to various watershed council projects over the next few years.</p>
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CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2017-2018
	<p>regarding responsible stormwater management, site preservation, recycling, and the reduction of pesticide and herbicide use.</p> <p>Measurable Goal: Continue partnering with local watershed councils to apply for grants that jointly benefit county roadway infrastructure and anadromous fish passage and habitat.</p> <p>Progress on Measurable Goal: 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, 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>10: Participate in a Public Education Effectiveness Evaluation</p>	<p>Responsible for Implementation: CCDTD</p> <p>BMP Description: As partners, CCSD#1, SWMACC, OLSD and CCDTD continue to coordinate efforts to meet the stormwater management requirements for the County. CCSD#1, SWMACC, and OLSD provide the vast majority of educational and outreach efforts for the geographic areas which pertain to CCDTD's MS4 SWMP. SWMACC's and CCSD#1's SWMPs include a BMP to participate in a public education effectiveness evaluation. CCDTD will review results of CCSD#1's, SWMACC's and OLSD's evaluation to identify whether results warrant changes to CCDTD's SWMP.</p> <p>Measurable Goal: Review outcomes of the public education effectiveness evaluations and identify whether adaptive management changes to the SWMP are warranted based on results.</p> <p>Progress on Measurable Goal: CCDTD has reviewed the results of the Public Education Effectiveness Evaluation which WES conducted on behalf of CCSD#1 and the SWMACC. CCDTD's opinion at this time is that the evaluation is not conclusive and does not provide us any new or conclusive information that would prompt any changes in regards to the way we conduct our public education and outreach. CCDTD, WES and the cities of Happy Valley and Rivergrove are in the process of creating a new combined SWMP. During this process, several meetings have been held to evaluate our SWMP BMP's. Through these meetings and discussions, we expect that some changes will take place in the way that we conduct our public education practices. Our proposed Shared Stormwater Management Plan has been submitted and we are awaiting comments and/or approval.</p>	<p>(1) Report on review and response to SWMACC's, OLSD's, and CCSD#1's public education effectiveness evaluations.</p>	<p>CCDTD has reviewed the results of the Public Education Effectiveness Evaluation that WES conducted. Based on the results, WES' evaluation does not provide evidence that would change how CCDTD conducts public education and outreach.</p>

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2017-2018
<p>11: Training for Employees</p>	<p>Responsible Department: CCDTD</p> <p>BMP Description: 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"> • Oregon Association of Clean Water Agencies conferences • ODOT Local Agency Training • American Society of Civil Engineers <p>Such training is provided based on need and availability.</p> <p>Measurable Goal: Attend relevant stormwater management related training based on need and availability.</p> <p>Progress on Measurable Goal: Attained</p>	<p>(1) Annual number of staff in Engineering and Transportation Maintenance Divisions that receive stormwater management-related training. List type of training.</p>	<ul style="list-style-type: none"> • APWA Fall Street Maintenance and Collection School, October 2017, 2 employees • Mid-Willamette Erosion Control Summit, January 2018, 8 employees • ODOT General Inspection Certification, January 2018, 4 employees • River Restoration Symposium, February 2018, 1 employee • APWA- Spring Street Maintenance & Collection, May 2018, 2 employees

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

TABLE 5 –Public Involvement and Participation

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2017-2018
<p>12: Provide for Public Participation with SWMP Submittal</p>	<p>Responsible Department: CCDTD</p> <p>BMP Description: 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>Measurable Goal: Provide for public participation with the SWMP prior to the permit renewal application deadline.</p> <p>Progress on Measurable Goal: Attained</p>	<p>N/A</p>	<p>Clackamas County DTD, WES and the cities of Rivergrove and Happy Valley submitted a combined SWMP due to the DEQ by February 28, 2017. A minimum 30 day public review period was included as part of the renewal process.</p>

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

TABLE 6 – Post-Construction Site Runoff BMP

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2016-2017
<p>13: Planning Procedures for New Public CIP Development</p>	<p>Responsible for Implementation: CCDTD</p> <p>BMP Description: 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>Measurable Goals:</p> <ul style="list-style-type: none"> • MG#1: Actively participate in the planning, design, and implementation of stormwater quality treatment for new and significant rehabilitation of roadway CIP projects. • MG#2: Track the location, type, and drainage area of new roadway CIP project water quality facilities. <p>Progress on Measurable Goals: Both attained.</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) Two (2) CIP projects were constructed with new water quality structural controls and treatment facilities:</p> <ul style="list-style-type: none"> - Boyer Extension Project: 0.60 acres of drainage area. 1,046 SF of Vegetated Treatment Planters & 1 Water Quality Manhole installed - SE 122nd Avenue and 132nd Avenue Sidewalk Project: 14,515.1 SF of Pervious Concrete Sidewalks and 3,310.4 SF of Pervious Concrete Driveways constructed <p>(2) Maps are available upon request</p>

CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2016-2017
<p>14: Update Procedures for New Development</p>	<p>Responsible for Implementation: CCDTD</p> <p>Summary of BMP Description: 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>Measurable Goals:</p> <ul style="list-style-type: none"> MG#1: Adopt amendments to county land use codes facilitating sustainable development. 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>. <p>Progress on Measurable Goals:</p> <ul style="list-style-type: none"> MG#1: There have not been any adopted amendments during the reporting period that affect environmental protections MG#2: CCDTD has continued to be active in the Watershed Protection monthly meetings in 2017-2018. These meetings have the same intent and purpose as the original Stormwater Management Steering Committee meetings and are well-attended. Additionally, CCDTD's Roadway Standards for the Tualatin River basin are consistent with WES's Stormwater Standards with a few exceptions. CCDTD staff will review revisions made to WES' Stormwater Standards and will consider their inclusion in CCDTD's Roadway Standards. 	<ol style="list-style-type: none"> (1) Track status of county zoning amendments. (2) Adopt county zoning amendments. (3) Track status of CCSD#1 standards revision. (4) Adopt CCSD#1 standards revision by reference to the county <i>Roadway Standards</i> 	<p>(1 and 2): (1) Zoning and Development Ordinance Section 1008 was eliminated from the County's development code. Portions of ZDO 1008 were out of date, were not used and/or were redundant. Instead, Clackamas County is using its Roadway Standards in place of ZDO Section 1008. Language was also added to Section 1006 of the ZDO that references the Roadway Standards. The Clackamas County Planning & Zoning Division plans to review and make appropriate amendments to most or all of its Natural Resource Protection ZDO's as soon as possible, but they are not able to commit to a timeline at this time due to current workloads.</p> <p>(3) The CCSD#1 Stormwater standards described in this BMP were not revised in 2017-2018.</p> <p>(4) The current Clackamas County Roadway Standards has adopted certain chapters of CCSD#1 Standards by reference.</p>

**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: 2017-2018
<p>15: County Roadway Operations and Maintenance Program</p>	<p>Responsibility for Implementation: CCDTD</p> <p>BMP Description: 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 2009 (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 pollutants of concern, to the maximum extent practicable, from entering the waters of the state.” Typical maintenance activities include:</p> <ul style="list-style-type: none"> • Ditch cleaning – Ditches are cleaned on a prioritized basis depending largely on upcoming scheduled road work. • 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. • 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. <p>Hazardous material collected during maintenance activities is properly disposed of in approved areas.</p> <p>Measurable Goals and Progress on Measurable Goals:</p> <ul style="list-style-type: none"> • MG#1: Formally adopt the 2009 ODOT Guide by January 1, 2013. • MG#2: Track the county roadway operations and maintenance program. <p>Progress on Measurable Goal:</p> <ul style="list-style-type: none"> • MG#1: The County has adopted and is currently using the 2014 edition of the ODOT guide. Clackamas County Transportation Maintenance has, however, 	<ol style="list-style-type: none"> (1) Formally adopt the 2009 ODOT Guide by January 1, 2013. (2) Number of miles of ditches cleaned. (3) Number of public catch basins cleaned and volume and/or weight of debris captured. (4) Number of miles of arterial streets swept and volume and/or weight of debris captured. 	<ol style="list-style-type: none"> (1) The current ODOT BMP guide is the 2014 edition, which we are using. We are however working on officially creating/adopting our own NMFS approved Routine Road Maintenance BMP manual. (2) 3 miles of ditches cleaned (3) 238 catch basins cleaned <ul style="list-style-type: none"> • 61.6 cubic yards of material removed (4) 1,000 curb/ shoulder miles swept on arterial roads. <ul style="list-style-type: none"> • 503 cubic yards of material removed

	<p>chosen to create their own Routine Road Maintenance BMP Manual, which they plan to present to NMFS for approval during the Winter of 2018. This has taken much longer than anticipated, but work continues on this endeavor. This manual will be as-protective or more-protective than the ODOT Manual once approved.</p> <ul style="list-style-type: none">• MG#2: The County continues to track all County roadway operations and the maintenance program as required and as demonstrated in the Tracking Measures Response.		
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CCDTD BMP Number & Name	BMP Implementation	Tracking Measures	Tracking Measures Response: 2017-2018
<p>16: Pesticide, Herbicide and Fertilizer Programs</p>	<p>Responsibility for Implementation: CCDTD</p> <p>BMP Description: 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>Measurable Goal:</p> <ul style="list-style-type: none"> • MG#1: Track the existing CCDTD IVM program. • MG#2: Review the existing IVM program and provide recommendations to minimize the use of chemicals by January 1, 2013. <p>Progress on Measurable Goals: 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: 2017-2018
<p>17: Maintenance of Structural Controls</p>	<p>Responsibility for Implementation: CCDTD</p> <p>BMP Description: 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, given the funding source and budget available and state and federal requirements.</p> <p>Public stormwater management facilities located within county transportation rights of way are identified in a database maintained by the Transportation Maintenance Division. The conveyance components may include culverts, storm sewer lines and inlets. The 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 – County Roadway Operations and Maintenance Program). Facilities are inspected for indications of illegal dumping and disposal and any damaged or nonfunctioning components. Maintenance is typically conducted during inspection and generally includes the removal of sediment, trash and debris, the replacement of proprietary system components (i.e., filter cartridges), and the removal and/or replacement of vegetation.</p> <p>The Districts address maintenance of private water quality facilities in the high priority areas.</p> <p>Measureable Goals:</p> <ul style="list-style-type: none"> • MG#1: Continue to verify that CIP stormwater structural facilities and controls are inventoried, mapped, inspected, operated and maintained. • MG#2: By January 1, 2013, develop a strategy that guides the long-term maintenance and management of CIP stormwater structural facilities and controls. <p>Progress on Measurable Goals:</p> <ul style="list-style-type: none"> • MG#1: Clackamas County continues to inventory new and/or discovered facilities. The approval and implementation of the new combined SWMP will prompt us to further discuss inspection, operation and maintenance plans/responsibilities with our SWMP partners. • MG#2: We are currently in the process of developing this strategic plan. The approval and implementation of the new combined 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. 	<p>(1) Develop long-term structural control maintenance and management strategy</p>	<p>The Clackamas County CIP group continues to work with its asset management team and 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 in February 2017), whose implementation will be shared amongst CCDTD, WES and the cities of Happy Valley and Rivergrove, includes BMPs that will address long-term structural control, maintenance and management strategy.</p>

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3.0 PROGRAM EXPENDITURES AND FUNDING SOURCES

The funding source for all DTD activities related to this permit is Clackamas County Road Fund. The majority of the Clackamas County road system is outside the UGB. 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.

TABLE 9: PROGRAM EXPENDITURES AND FUNDING SOURCES FOR MS4 PERMIT

Program	2017/2018 Total Expenditures ¹	2017/2018 Expenditures within the Urban Growth Boundary (UGB) ²	2018/2019 Anticipated Expenditures within the Urban Growth Boundary (UGB) ³
Culvert/Storm Sewers	468,154	151,193	155,729
Ditch Maintenance	121,700	29,345	30,226
Hydroseeding	200	200	206
Street Sweeping	324,466	254,693	262,334
Water Quality Facilities	6,407	6,407	6,599
Grand Total	920,927	441,839	455,094

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% added to 2017/2018 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 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 combined and 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.

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. CCDTD is currently working with CCSD#1, SWMACC, and the cities of Happy Valley and Rivergrove to create a new, combined SWMP. It is anticipated that there will be several improvements with the creation of this new SWMP, which will be reflected upon submittal of our renewal. This new SWMP will include several improvements, including clarity on the delineation of MS4 related responsibilities. At this time, however, there are no changes to the existing SWMP.

4.3 Monitoring Data and Monitoring Plan [Schedule B(5)(f) and (g)]

DTD does not perform monitoring of surface/stormwater quality. See the annual reports by OLSD and WES 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.

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 2017-2018 reporting period. No UGB expansion or land annexation is anticipated for 2018-2019.

New development 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 143 Development permits, County-wide. Fifty-three (53) of those were within the permit area; the total new and impervious surface area from these developments is reported by OLSD and WES.

4.6 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 must include provisions for receiving and considering public comments on this annual report. A draft version of this 2017-2018 annual report was made available to the public on DTD's website and available by hard copy. Public comment opened on Friday, October 19 and ended at 11 p.m., Sunday, October 28.

4.7 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 OLSD 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 OLSD and WES for more information about these portions of the MS4 permit.

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APPENDIX A

Pesticides Used in CCSD#1 and WES in 2017-2018

Description	Units	EPA Reg. No.	Zip Codes Intersecting CCSD#1 and/or the OLSD								Zip Codes Intersecting SWMACC					Total Estimated Quantity
			97015	97045	97086	97089	97206	97222	97267	97034	97035	97062	97068	97070	97140	
Capstone	Quart	62719-572	0.4	222.2	3.7	97.5	0.2	4.0	0.0	11.2	3.2	26.9	242.4	36.8	0.0	648.6
Esplanade 200 SC	Pint	432-1516	0.1	48.8	0.8	10.4	0.0	0.0	0.0	1.1	0.0	3.7	11.2	8.0	6.8	90.9
Esplanade EZ	Pint	432-1528	21.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1
Landmark XP	Ounce	352-645	0.7	512.8	8.4	114.1	0.0	0.0	0.0	10.9	0.0	39.0	116.3	82.4	70.6	955.2
Pathfinder II	Pint	62719-176	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
QUIKPRO	Ounce	524-535	8.3	16.0	2.2	204.0	0.0	0.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	315.5
RODEO	Quart	62719-324	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roundup Pro Concentrate 2.5 Gallon	Quart	524-529	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Roundup Pro Max	Quart	524-579	0.3	119.4	2.3	29.1	0.5	0.9	0.2	2.4	0.0	8.2	25.9	19.0	15.8	223.9
SURE GUARD (VALENT)	Ounce	59639-120	1.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8

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