Lane County Public Works Department

Engineering & Construction Services Division

November 29, 2022

Oregon DEQ
Attn: Priscilla Woolverton
165 E. 7th Ave., Ste. 100
Eugene, OR 97401-3049

Re: Lane County Willamette Basin TMDL Annual Report 2021-2022

The purpose of this cover letter is to provide the Oregon Department of Environmental Quality (DEQ) with a summary of the County's 2021-2022 efforts towards meeting the 2022-2024 Lane County Willamette Basin TMDL Implementation Plan matrix activities and deadlines. This updated implementation plan was created in response to the Mercury TMDL.

Background and Purpose of Willamette TMDL Matrix

The Federal Clean Water Act (CWA) of 1972 "authorizes the U.S. Environmental Protection Agency (EPA) to 'restore and maintain the physical, chemical, and biological integrity of all waters of the nation.'" In response to the CWA, the EPA designated state agencies to develop water quality standards, perform water quality monitoring to understand current conditions, determine sources of pollution, and develop TMDLs as a tool to improve water quality. As a component of the overall effort to protect and restore the beneficial uses of Oregon's waterbodies, Oregon's Department of Environmental Quality (DEQ) issued TMDLs for the entire Willamette Basin.

Lane County is a designated management agency (DMA) in the Willamette River Total Maximum Daily Load (TMDL). A TMDL is the calculated pollutant amount that a waterbody can receive and still meet Oregon water quality standards. The Oregon DEQ developed the TMDL for the Willamette River in 2006. In Lane County, the Willamette River is water quality limited primarily due to elevated water temperatures and high bacteria and mercury levels. The County developed our Willamette Basin 5-year Implementation Plan to improve water quality and meet the TMDL requirements set forth in the TMDL for DMAs.

DEQ approved Lane County's first Total Maximum Daily Load (TMDL) Implementation Plan in April 2008. In the summer of 2022, DEQ reviewed the current 2022-2024 updated implementation plan, which incorporates the changes required for the updated Mercury TMDL.

Receiving Waterbodies

The Willamette River is a major tributary originating from the Willamette Basin and flowing northward to the Columbia River. Lane County encompasses a large portion of the headwaters region of the Willamette River Basin. This southernmost area of the Willamette Basin contains many forested streams that begin as spring-fed rivulets, snowmelt drainages, or small mountain lakes. Lane County hosts four of the 12 sub-basins of the Willamette Basin, which eventually contribute to the Willamette

River. Each sub-basin has a unique watershed that drains to tributaries of the main stem Willamette River, including the Middle Fork Willamette River, Coast Fork Willamette River, McKenzie River, and the Upper Willamette River. A full description of these waterbodies is in Section 2.2 of the 2014 Implementation Plan. The DEQ classifies multiple waterbodies within each sub-basin as water-quality impaired since they do not meet the current water-quality standards and places them on the 303d list. Summaries of each of these sub-basins and their water-quality impaired waterbodies is below:

Lane County Willamette River Sub-basin	Water-quality Impaired Waterbodies		Key Water Quality Limitations
Middle Fork Willamette River	Anthony Creek	Mike Creek	Exceeds water quality criteria for Temperature and Dissolved Oxygen
	Bohemia Creek	North Fork Middle Willamette River	
	Coal Creek	Packard Creek	
	Fall Creek	Portland Creek	
	Hills Creek	Salt Creek	
	Little Fall Creek	South Fork Winberry Creek	
	Lost Creek	Two unnamed waterbodies	
	Middle Fork Willamette River	Winberry Creek	
Coast Fork Willamette River	Brice Creek	Mosby Creek	Exceeds water quality criteria for Temperature, Dissolved Oxygen, Mercury
	King Creek	Row River	
	Layng Creek	Sharps Creek	
	Martin Creek	Coast Fork Willamette River	
McKenzie River	Blue River	McKenzie River	Exceeds water quality criteria for Temperature and Dissolved Oxygen
	Deer Creek	Mill Creek	
	French Pete Creek	Mohawk River	
	Horse Creek	Shotgun Creek	
	Unnamed tributary to Rebel Creek		
Upper Willamette River	Long Tom river		Exceeds water quality criteria for Temperature, Dissolved Oxygen and Bacteria

The Water Quality Management Plan developed by DEQ identified temperature, bacteria, and mercury as the three main pollutants common to the all sub-basins within the Willamette Basin. Although other parameters such as dissolved oxygen, arsenic, and lead are present in specific waterbodies of some of the sub-basin TMDLs, those require sub-basin specific TMDL plans. The three major pollutants identified above are widespread throughout the entire Willamette Basin, including the County DMA. The County addresses these three pollutants in the County's implementation plan. A brief summary of these three TMDL parameters is in Section 3.1 of the 2014 Implementation Plan.

Annual Report Matrix

The attached matrix summarizes our efforts, activities, and actions taken during the July 2021 to June 2022 reporting window. A brief overview of the key accomplishes from this year is provided below:

1. To support Riparian Protection and Restoration efforts under the County's TMDL Implementation Plan, Lane County completed development of a GIS-based property review model used to identify and analyze foreclosed and surplus properties for riparian conservation and associated water temperature benefits (see Strategy A-6 and *Surplus Property Evaluation 2021-2022* attached). Properties that are determined to have met the key thresholds (yes/no answer from model) for easement consideration are then reviewed individually to determine the potential for easement creation. Through this auction property process, the County was able to transfer ownership of a 1.5 acre property containing riparian features to the City of Eugene in 2020/2021 (we were not aware of this transfer during our last reporting window). This year, a 50-acre island property north of Harrisburg is in negotiations to be transferred from the County and dedicated into a conservation and riparian protection by Willamette Riverkeeper.
2. Lane County's Engineering and Construction Services Division added an Environmental Engineering group of staff dedicated to stormwater quality conservation goals outlined in the TMDL Implementation Plan. This group includes one 1/2 FTE for the Environmental Engineering Supervisor and 2 FTE for the Stormwater Coordinator and Stormwater Technician positions. During the reporting year, the County had the supervisor and the technician positions filled. In the next reporting year, the County has two additional positions approved and is working to hire the positions.
3. In support of the County's efforts toward Pollution Prevention in Municipal Operations and to meet broader climate action goals, Lane County developed a Climate Action Plan that prioritizes the use of energy efficient vehicles and installation of charging infrastructure to meet fueling needs as more electric vehicles are deployed.
4. Lane County staff collected 281,600lb of trash and 200 gallons of household hazardous waste associated with illegal dumping, mitigating impacts to local waterways.
5. In February 2022 the County updated the illicit discharge ordinance and moved it from Lane Code Chapter 5 to Lane Code Chapter 9.021. The code amendments were partially to meet the requirements of the 2019 NPDES MS4 Phase II permit as well as make the code more robust.

While immediate impacts of Covid-19 were less prominent in the 2021-2022 reporting year, long-term impacts continued to affect County operations and associated accomplishments toward TMDL goals. Impacts affected County operations in the following ways:

- Upon returning to the office following the Covid-19 pandemic restrictions, stormwater workload that was postponed in 2020 and portions of 2021 resulted in a backlog of work to be completed.
- Multiple aspects of the Covid-19 pandemic caused staffing shortages, and shortages continued upon returning to the office.
- Despite Covid-19 impacts, Lane County was still able to conduct work to support long-range TMDL plans.

If you have any questions please contact our Environmental Engineering Supervisor, Mauria Pappagallo, at mauria.pappagallo@lanecountyor.gov.

Regards,

Peggy Keppler, PE
Lane County Engineer

Mauria Pappagallo, PE
Environmental Engineering Supervisor

Lane County Riparian Protection Program: 2021 TMDL Surplus Property Evaluation Process

Objective:

To support the Willamette River Implementation Matrix strategy A-6 which is focused on reducing solar radiation on streams by increasing riparian habitat temperatures, Lane County has evaluates foreclosed and surplus properties that are set to go to auction to see if they are candidates for possible partial retention or riparian easement creation.

A GIS model was created to evaluate the tax assessor's list of property parcels on natural resource factors which are very similar to those evaluated for our Erosion Prevention Code development which the County is currently developing and plans to adopt in 2023.

Key Considerations:

This table illustrates the natural resource factors evaluated in the GIS model using GIS data layers containing the extent of specific resources and their corresponding attribute, as well as what the attributes' threshold for erosion prevention includes.

	Considerations	**GIS Owner and Data Layer** **Attribute**	**Definition**	**Potential Threshold for easement Considerations**
SOILS	Presence of Erodible Soil	USDA / NRCS SSURGO (Soil Survey Geographic database) Horizon Attribute Table	The data was queried for the K-Factor attribute, which represents both the susceptibility of soil to erosion (soil composition) and the rate of runoff (slope), as measured under the standard unit plot condition. There are 3 classes of soil erodibility: "Low" is assigned 0.05 to 0.15 "Med" is assigned 0.16 to 0.4 "High" is assigned >0.4	The site contains highly erodible soils (Presence / Absence of erodible soils) Intent: The more erodible the soils the higher need for riparian vegetation.
	Lane County Coastal Overlay	Lane County LMD adopted Overlay Layer	This data contains the locations of dredged material disposal sites, beaches, and sand dunes.	Presence / Absence of Coastal Resources Intent: Maintain robust coastal resources.
WETLANDS	Floodplain potential	FEMA		The site is in a known floodplain.

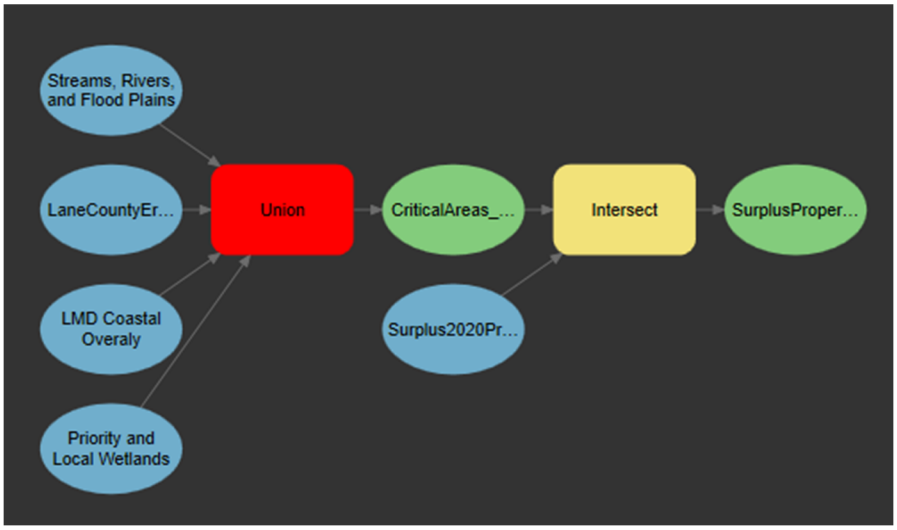
		NFHL (The National Flood Hazard)	This data incorporates all Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters of Map Revision (LOMRs) that have been issued against those databases since their publication date. There are 2 classes: "True" flood risk "False" flood risk	Intent: Maintain riparian habitat in flood prone areas.
	Presence of riparian features	OWRD Hydrography to the 4th Hydrologic Unit (HUC4)	This data is to identify the states' surface water including class I streams, minor streams, canal, flume, pipeline, lake, reservoir and other linear hydrographic feature centerlines. Lane County added an "Unnamed" for features with no other identifier.	Existing adopted Riparian distances Non-Resource zoned property: 50ft from OHW Resource: 100 ft Intent: The parcel or tax lot of record has the potential to directly drain into a water feature or its designated buffer area.
	Proximity to Impaired riparian features	DEQ / EPA	This feature spatially displays information about water quality in Oregon's rivers and streams based on Oregon's 2010 Integrated Report Assessment Database and 303(d) List (as approved by EPA on March 15, 2012	Presence/Absence Intent: The parcel or tax lot of record has the potential to directly drain into a water feature or its designated buffer area.

	Proximity to drinking water source protection areas	DEQ / EPA / DHS	Groundwater source areas were delineated by the Oregon Dept. of Human Services/Drinking Water Program using geologically-based methods and/or models for each well or spring to illustrate the susceptibility of the drinking water system.	Presence/Absence Intent: The site overlays drinking water sources that may be impacted by erosion and / or mismanagement of rainwater where pollution may contaminate sources.
	Proximity to Wetlands	DSL LWI	Local wetland delineations as maintained by DSL.	Presence/Absence Intent: The site may contain wetlands requiring a federal / state permit
	Proximity to Priority Wetlands	Wetlands Conservancy / Oregon Natural Heritage Information Center	Identifies areas with concentrations of important wetland habitats and opportunities for successful wetland restoration.	Presence/Absence Intent: The site may contain wetlands with a high function / value

Model Parameters:

The GIS model is one based on the spatial proximity of the parcel to the natural resource layers. The model essentially asks 'Does the parcel contain or is within 100-feet of a natural resource.

A visual depiction is below where resources are buffered by 100-feet, combined, and 'intersected' with the evaluated property:



Lane County Riparian Protection Program: 2021 TMDL Surplus Property Evaluation Process

The output table returns “Yes” or “No” values. If the model returns yes answers then the County assesses if the condition of the property and the percentage of the property that would need to be turned into a riparian easement. If the easement would take over 70-percent of the property or more then the County considers if we can afford to retain it or work with other agencies and partners to take over ownership of the property. If the property is determined to be hard to auction due to its condition then the County does not peruse an easement. Final decisions are made in conjunction with the County property management office.

NPDES MS4 Phase II C.M.	Strategy (Lane County Actions)	Target Pollutant	Pollution Source	Measurable Goals (Indicator of Progress)	Program Description (Policy reference)	Monitoring Scope	Actions	Timeline/ Frequency	Responsible Division/ Funding Source(s)	How (Measures)	Annual Reporting (July 2021 -June 2022)
(A) Riparian and Wetland Protection and Restoration Programs											
6	A-1 Regulate existing floodway and floodplain to maintain critical functions through existing code provisions	Temperature	Sediments	Application of floodplain modification standards in LC 16.244, LC 10.271	Prevent flood damage to riparian areas through permitting process	Countywide	1. Review floodplain floodway declaration applications	Ongoing	LMD Manager	LMD will track floodplain related applications in the Accela Tracking system	Lane County tracked 118 floodplain related applications in the Accela Tracking system.
N/A	A-2 Regulate riparian areas through existing code provisions	Temperature	Solar Radiation	Implementation of Riparian modification standards in LC 16.253	Protect riparian area encroachments and regulate existing riparian vegetation	Countywide	1. Apply Lane Code 16.253 Riparian Setback requirements for all development proposals	Ongoing	LMD Manager	Track the number of riparian related complaints and responses.	Lane County responded to three riparian complaints. Of those complaints, two properties were found to be in violation of Lane Code 16.253 for Riparian Setback. Compliance letters were sent to both property owners and owners are currently in the process of obtaining proper riparian and greenway permits through Lane County's Planning Division.
										Track the number of Riparian Setback Special Use Permit applications	Lane County tracked two Riparian Setback Special Use Permits.
6	A-3 Replant equivalent acres/number of trees in riparian areas impacted by public improvement projects with native trees and shrubs in accordance with prevailing best management practices	Temperature	Solar Radiation	Implementation of –Tree Removal (Activity P2365) Implementation of – Seeding & Mulching (Activity P2355)	LCPW, Road Maintenance Division Water Quality & Habitat Guide BMPs – Vegetation Activities	Countywide	1. Monitor tree and shrub removal and replacement activities as per standard practices. 2. Follow appropriate BMPs when removing hazard trees, track with Tree Removal (Activity P2365)	Ongoing	RMD Manager ECSD Manager PD Manager	RMD Track seeding and mulching activities associated with riparian areas under appropriate reportable activity codes with measurable accomplishments recorded as area seeded and/or mulched or hours depending on project type.	Lane County Road Maintenance crews estimated zero hours spent seeding and mulching in riparian corridor sites; however, this value is slightly skewed due to recent changes in tracking of this metric to better focus on vegetation efforts in riparian areas specifically (instead of road maintenance activities overall). Staff is working to better track this newly revised metric by tracking vegetation efforts associated with force account culvert replacement projects. There were no force account culvert replacement projects during the reporting timeframe.
										PD to report number of trees removed and planted within riparian zones each year	Lane County's Parks Division completed riparian plantings for the Hendricks Bridge project, 0.6 acres of invasive removal and riparian plantings as mitigation for a new boat ramp. In the winter of 2022, Lane County planted ten bare root bigleaf maples, 150 native shrubs/small trees in one gallon containers, and 150 willow stakes. In a separate task, the Parks Division removed one large cottonwood tree that was a hazard at Rodakowski Landing on the McKenzie; no replacement trees were planted but the stump was left high enough that it will resprout.
										RMD and ECSD to track the number of projects that involve riparian planting.	Lane County completed three projects involving riparian planting: Five River Roads (M.P 1.52 to M.P 4.63) Culvert Replacements, Mercer Lake Road Soil Stabilization, Phase VI Landfill Expansion and Wetlands Mitigation Project.
1 & 6	A-4 Promote riparian related projects as funding allows	Temperature	Solar Radiation and Sediments	Active participation and working relationship between County staff, regional watershed councils, and restoration practitioners	Partnership/ coordination	Countywide	1. Collaborate with watershed council partners and other applicable restoration practitioners on projects of mutual interest. 2. Complete one riparian related project within the timeframe of the implementation plan cycle, as funding allows.	Ongoing	RMD Manger ECSD Manager PD Manager WMD Manager	Track the number of meetings between County staff and WSC staff	Lane County staff attended five meetings with WSC staff. Efforts include partnering with the Siuslaw WSC and BLM on the Swartz Creek culvert replacement project and assisting coordination with the Urban Waters and Wildlife Partnership.
										Track time spent on outreach and communication with Watershed Council – Watershed Council Support (Activity P1160)	Lane County records indicate it dedicated 15 hours of staff time to Watershed Council support. County staff also dedicated 120.25 labor hours to the Swartz Creek Project during the permit term. Lane County's Parks Department collaborated with McKenzie WC and others to allow Armitage Park to be used for the annual McKenzie River cleanup
										Track the number of riparian related projects completed by WMD or PD	The Parks Division of Lane County engaged in one riparian related project during the permit term. The Hendricks Bridge project consisted of invasive removal and riparian planting as mitigation for a new boat ramp and included plantings of ten bare root bigleaf maples, 150 native shrubs/small trees in one gallon containers, and 150 willow stakes.
							3. Investigate the tools, resources, and partnerships that would be needed to do a feasibility study on developing a LiDAR Mapping Application for riparian vegetation along temperature-limited streams.	2024	ECSD Manager	Track hours spent on the investigation	This is a new action and due to Covid-19, financial, and staffing constraints, the start date is delayed to the next reporting year. As of November 2022, the County has hired two new stormwater staff and expects to be able to work on this during the next reporting window.
										Meet with at least two local jurisdictions (Watershed Councils or municipalities) to look at what resources or interest they may have in supporting this effort.	This is a new action and due to Covid-19, financial, and staffing constraints the start date is delayed to the next reporting year. Most of our efforts during the reporting year were focused on meeting NPDES MS4 Phase II permit requirements and developing County-wide erosion prevention code which also supports the Mercury TMDL requirements. As of November 2022, the County has hired two new stormwater staff and expects to be able to work on this during the next reporting window.
6	A-5 Identify watershed council partners and support riparian restoration and/or LID on-the-ground projects	Temperature Mercury Bacteria	Solar Radiation and Sediments	As funding allows, partner with watershed councils on waterways improvement projects such as culvert replacements, stream bank stabilization, invasive species removal, riparian tree planting etc.	Culvert Replacement Program	Countywide	1. Coordinate and participate with watershed councils on restoration projects	Ongoing; Annual review	ECSD Manager RMD Manager	Track the number of capital improvement /road maintenance projects having restoration components involving watershed council support.	Lane County records indicate two fish passage culverts were constructed as part of one project this reporting year that involved Watershed Council support: Five River Roads (M.P 1.52 to M.P 4.63). This project was completed in partnership with the Mid Coast WC.
							2. Support staff participating in riparian restoration classes and workshops.		ECSD Manager RMD Manager LMD Manager WMD Manager PD Manager	Track the number of riparian restoration related trainings staff attend and the number of staff attending trainings.	Eighteen staff members attended a total of ten training events during the reporting period. Three Certified Floodplain Managers attended a Federal Emergency Management Agency training. Eight Land Management staff attended in-house trainings that included a new floodplain verification process training, elevation certificate training, substantial improvements training, and a basic floodplain training. Two Land Management staff attended a Northwest Regional Floodplain Management Association conference. One Land Management staff member attended external trainings that included a Lower McKenzie Resiliency Workshop and a National Flood Insurance Program Rating 2.0 training. One Engineering and Construction Services staff member attended the River Restoration Northwest Conference and four staff members attended an Erosion Control Summit hosted by Salem and Marion counties.

NPDES MS4 Phase II C.M.	Strategy (Lane County Actions)	Target Pollutant	Pollution Source	Measurable Goals (Indicator of Progress)	Program Description (Policy reference)	Monitoring Scope	Actions	Timeline/ Frequency	Responsible Division/ Funding Source(s)	How (Measures)	Annual Reporting (July 2021 -June 2022)
6	A-6 Look for opportunities to retain and/or create easements on county owned/ disposed properties for riparian purposes	Temperature	Solar Radiation	Setup program and process that looks for opportunities to retain and/or create easements on surplus properties	Surplus properties and foreclosed on properties auctions	Countywide	1. Monitor and review County initiated surplus property auctions for possible parcel retention	Annual review	ASC Manager ECSD Manager	Track the number of parcel analyses performed for auctioned properties	Lane County records indicate 17 parcels were evaluated.
										Track the number of parcels retained and/or had easements created for riparian purposes	No easements were created during this reporting period; however, negotiations have started on a 50-acre island parcel with Willamette Riverkeeper for long-term conservation and riparian protection.
								December 2021		Develop riparian assessment checklist for reviewing surplus properties	Lane County completed development of a GIS-based riparian model to identify and analyze auctionable foreclosed and surplus properties that contain or are proximal to class I streams, minor streams, lakes or reservoirs, are within Federal Emergency Management Agency (FEMA) floodplains, or contain priority wetlands (as defined by the Wetlands Conservancy / Oregon Natural Heritage Information Center GIS data layer). This GIS model will be used on an annual basis to identify priority surplus properties for riparian conservation. See model overview attached "SurplusPropertiesEvaluation".
(B) Pollution Prevention in Municipal Operations											
6	B-1 Prioritize mechanical mowing over chemical uses	Bacteria, Temperature Mercury	Chemical agents, sediments	Implementation of Vegetation Management Program activities to minimize herbicide use.	The vegetation management program includes Mowing, Brush Mowing and Brush Cutting actions	Countywide	1. Use roadside mowers, brush mowing and brush cutting in vegetation management	Ongoing	RMD Manager	Report roadside miles (RSM) as well as hours mowed (Track accomplishments for Zones 1-4 only), where available. RMD to report per the following activity codes Brush Mowing (Activity P2330), Mowing Safety Strip (Activity P2340), Mowing Full Width (Activity P2347), Top Trimming (Activity P2346), Brushing Manual (Activity P2335)	County records indicate the following hours by activity code (zones 1-4): P2330 - mowing mechanical brush - 642 Road Service Miles and 7,256 hours P2335 - brushing manual - 445 hours P2340 - mowing safety strip - 2,156 Road Service Miles and 4,453 hours P2346 - top trimming - 35 Road Service Miles and 1,083 hours P2347 - mowing full width - 1,443 Road Service Miles and 5,097 hours
1 & 6	B-2 Minimize common pollutants found on roadway surfaces through Lane County's Street Sweeping and Leaf Pickup programs.	Bacteria, Mercury	Pet waste, Chemical agents, Hydro-carbons, Leaks, Sediments	Street sweeping and leaf pickup accomplishments	Street Sweeping Program collect roadway debris and pollutants before they reach stream, waterbodies	Countywide	1. Sweep curbed streets 2. Conduct annual leaf pickup events	Ongoing	RMD Manager	Lane miles swept within monitoring period – Sweeping (Self-contained) (Activity P2255)	Lane County records indicate 823 lane miles were swept during the reporting period.
										Report the quantity of leaves collected – Leaf Removal (Activity P2315)	Lane County records indicate 3,405 cubic yards of leaves were collected during the reporting period.
6	B-3 Train County employees on stormwater best management practices	Bacteria, Mercury, Temperature	Pest, Chemical agents, Leaks	Participation in internal and external trainings	County staff training	Countywide	1. Conduct annual training for all maintenance employees	Annual	RMD Manager WMD Manager LMD Manager PD Manager FD Manager ECSD Manager	Conduct and report the number of internal stormwater trainings given, number of attendees and hours trained.	Lane County records indicate 11 internal trainings were held with a total of 65 attendees, 14 hours of training, and 66.5 labor hours.
										Report stormwater topics covered	Topics covered during internal trainings included: overview of County SWMP and proposed BMPs, changes to the 1200-C permit, the 1200-Z permit, overview of the County's stormwater regulations and financial impacts, pet waste management, vactor truck use, Vue Works asset management system, and schema development. Topics covered in external trainings included: effective utility management methods, erosion control summit training, 6PPD overview, PFAS overview, SWQF maintenance overview, pervious pavement, overview of Mercury/Methylmercury, WQ facility efficacy and LiDAR GIS models, in-stream channel restoration, Private Forestry Accord to support water quality and ESA listed species, code review of LID and proprietary device maintenance, zinc source tracking, MS4 Ph II permitting, UIC permitting, SFR funding and SW updates, 1200Z training, and spill response procedures.
1 & 6	B-4 Reduce fuel consumption and leakages	Temperature Mercury	Chemical agents, Hydro-carbon, Lead	Incorporation of electric and high MPG vehicles in the transportation fleet	Fleet Replacement Program	Countywide	1. Consider replace fossil fuel-based vehicles to electric or hybrid systems	Ongoing	FD Manager	Report the number of new energy efficient fleet vehicles	Lane County did not purchase a new energy efficient fleet vehicle during the reporting period; however, the county expects to continue increasing use of energy efficient vehicles to address this water quality improvement strategy and, more generally, as part of the Lane County Climate Action Plan. The goals of this plan are to continue adoption of electric vehicles as gas vehicles age out and to establish charging infrastructure to meet associated fueling needs as more electric vehicles are deployed. See the Lane County Climate Action Plan at https://www.lanecounty.org/cms/one.aspx?pageId=16461487.
										Report estimated fuel savings	No new EV or high MPG vehicles were purchases during this reporting period, so estimated fuel savings for new vehicles is not applicable or zero. For more information about Lane County's long term goals for greenhouse gas mitigation, see the Lane County Climate Action Plan at https://www.lanecounty.org/cms/one.aspx?pageId=16461487.
										Report the number of vehicles serviced	Lane County serviced 734 individual vehicles and completed 908 preventative maintenance services across those vehicles. The entire fleet population is about 1,420 vehicles and is serviced regularly to prevent leaks and damage.
2 & 3	B-5 Intercept mercury containing waste to prevent it from going to the landfill	Mercury	Household waste	Facilitation of convenient disposal of mercury containing household waste through off-site rural roundup events	Annual Hazardous Waste Rural Roundup Program	Countywide	1. Conduct annual events for collection of households' florescent light bulbs and other domestic waste containing mercury.	Four to five roundups per reporting period	WMD Manager	Report the number of collection roundups occurred annually	One household hazardous waste (HHW) cleanup event was conducted at the Florence Transfer Station on August 20th and 21st, 2021.
										Report the pounds of waste collected	Lane County collected 18,797.5lb of waste during the HHW roundup.
										Estimated mercury waste intercepted	Lane County intercepted 2.5lb of mercury during the HHW roundup.
1 & 2	B-6 Safe disposal of household hazardous waste	Mercury	Household waste containing hazardous materials	Quantity of mercury containing waste collected at the Lane County's hazardous waste facilities.	Special Waste Program	Countywide	1. Collect hazardous waste at the County collection sites	Weekday collection	WMD Manager	Report total pounds collected	Lane County collected 618,450lb of waste at County collection sites.
										Report quantity shipped for disposal	Lane County shipped 618,450lb of hazardous waste for disposal from County collection sites.
										Estimated mercury intercepted	Lane County intercepted 150lb of mercury from County collection sites.

NPDES MS4 Phase II C.M.	Strategy (Lane County Actions)	Target Pollutant	Pollution Source	Measurable Goals (Indicator of Progress)	Program Description (Policy reference)	Monitoring Scope	Actions	Timeline/ Frequency	Responsible Division/ Funding Source(s)	How (Measures)	Annual Reporting (July 2021 -June 2022)
1 & 2	B-7 Safe disposal of mercury containing business waste	Mercury	Business waste containing mercury products	Collection roundups and quantity of waste intercepted	Hazardous Waste	Countywide	1. Work with non-household businesses to collect mercury containing waste 2. Recycle mercury-containing waste	Four to Five business pickup visits per year	WMD Manager	Report the number of collection visits occurred annually	Lane County coordinated four collection events for fluorescent lamps and one mobile collection event for hazardous waste.
										Report the pounds of waste collected	Lane County collected 62,064.5lb of waste at these events.
										Estimated mercury waste intercepted and recycled	Lane County collected 2.53lb of mercury from fluorescent lamps and 2.5lb of mercury from the mobile hazardous waste collection, for a total of 5.03lb of mercury intercepted and recycled at these events.
1	B-8 Educate citizens about recycling and hazardous waste management	Mercury, Bacteria	Household waste, refuse	Achieve countywide recycling goal	Recycling Program	Countywide	1. Run advertisements regarding waste management methods 2. Conduct Master recyclers classes 3. Distribute newsletters and brochures	Newsletter biannual	WMD Manager	Report Master Recycler Program reached with messages and information about recycling and hazardous waste	Master Recycler education contacts: 592 Master Recyclers who reported activity: 47 Master Recycler volunteer hours: 1,737 Activities with the most participants or hours reported: Churchill High School Green Team: 603 hours, 24 Master Recyclers reporting NextStep Electronics Refurbishing 530 hours, 1 Master Recycler reporting BRING reused materials product development 216 hours, 1 Master Recycler reporting Plastics Recycling Collection Activities 115 hours, 16 Master Recyclers reporting
										Report the number of radio, tv, and digital ads annually	Lane County aired 648 public education advertisements through 18 local radio stations, ran three earned media spots and a six-month advertisement spot on KEZI and KMTR television, and sent 708 digital advertisements that reached 12,770 subscribers.
										Report the number of brochures, newsletter distributed annually	Lane County distributed 11,936 brochures and 24,398 newsletters.
6	B-9 Monitor/update existing RRM BMP Guide and incorporate applicable BMPs into the employee-training program	Bacteria Mercury Temperature	Non-accepted road maintenance practices	Introduction of new best management practices related to stormwater pollution reduction in road maintenance practices and training events	Road Maintenance Program	Countywide	1. Research new operational BMPs 2. Conduct trainings to implement new BMPs	Annual	RMD Manager	Report new BMPs implemented and included in training materials based on ODOT's Routine Road Maintenance Water Quality and Habitat Guide: Best Management Practices "blue book" (updated every 5 years)	Lane County staff receive on the job trainings for all new hires that focus on the design, development, and staff review of implemented BMPs to annually monitor existing BMPs though routine inspection and maintenance.
										Report any new trainings received and imparted	Road Maintenance staff attended two APWA Street Collections and Maintenance trainings that covered topics including GIS field inspections, pipe CCTV practices, and vegetated stormwater facility maintenance.
6	B-10 Maintain catch basins, pipes, and culverts	Bacteria, Mercury	Hydrocarbons, lead, chemicals	Maintain stormwater infrastructure and replace failing components as necessary	Road maintenance Program	Countywide	1. Maintain inlets, catch basins, manholes 2. Maintain pipes and culverts 3. Replace failing inlets, pipes, manholes as necessary	Ongoing	RMD Manager ECSD Manager WMD Manager	Report the number of inlets maintained	Lane County maintained 1,319 inlets during the reporting year.
										Report the linear feet of stormwater pipes maintained	Lane County cleaned 420 linear feet of stormwater pipes during the reporting year. Due to staffing constraints, the River Road/Santa Clara Stormwater Assessment project cleaning efforts were on hold during this reporting year.
										Report replaced/ rehabilitated infrastructures	Lane County dedicated 165 labor hours to maintenance of stormwater infrastructure during the reporting year. This is based on timesheet coding, but it is likely a low estimate. We are continuing to work on improvements to time tracking metrics.
										Track the quantity and type of new stormwater quality treatment facilities created outside the UGB.	The County constructed a stormwater pond and bioswale on a territorial road as part of the Stony Point safety improvements project.
(C) Pet/Animal Waste, Septic Systems, Illicit Discharges											
1 & 3	C-1 Reduce pet waste in public areas by enforcing applicable regulations and facility improvements as funding allows	Bacteria	Pet and animal waste	Maintenance of pet waste stations and signs in public areas	Pet waste pickup guidance and ordinances LC 6.585 and LC 7.140	Countywide	1. Stock pet waste stations with disposal bags 2. Add new bag dispensers as funding allows 3. Review for opportunities to install new waste collection stations as funding allows	Ongoing	PD Manager	Track the number of rolls of pet waste pickup bags purchased for parks in the Willamette Basin	Lane County purchased 10,000 pet waste bags during the reporting year. Prorated for the percentage of dispensers located within the Willamette Basin (26 of 35 stations), the County purchased 7,428 bags for Willamette Basin parks during the reporting year.
										Report the number of new pet waste pick up stations added	No additional pet waste pick up stations were added during this reporting year.
							4. Conduct an inventory of the number of pet waste stations	June 2021	PD Manager	Determine the number of existing pet waste stations	26 of 35 stations are located within the Willamette Basin.
6	C-2 Continue subsurface sanitation program for new/replacement systems and failures of existing systems	Bacteria	Failing septic systems	The number of septic system inspection and investigations and permits issued	Septic System Setback Requirements, Subsurface Sanitation Program	Countywide	1. Review new and replacement septic system per County design standards 2. Investigate septic system failures	Ongoing	LMD Manager	Report the number of new septic system installation permits	Lane County issued 112 new septic system installation permits during this reporting year.
										Report the number of septic system alteration and repair permits in the Accela Tracking system	Lane County tracked 267 septic alterations in the Accela tracking system during this reporting year.

NPDES MS4 Phase II C.M.	Strategy (Lane County Actions)	Target Pollutant	Pollution Source	Measurable Goals (Indicator of Progress)	Program Description (Policy reference)	Monitoring Scope	Actions	Timeline/ Frequency	Responsible Division/ Funding Source(s)	How (Measures)	Annual Reporting (July 2021 -June 2022)
1	C-3 Educate public on septic system maintenance, failures and pollution risks through educational material distributions	Bacteria	Failing septic systems	Distribution of septic system management educational brochures to parties involved with new and replacement septic systems and septic system failures	Subsurface Sanitation Program	Countywide	1. Distribute educational material during permit issuance and during new/replacement applications and during septic investigations 2. Educate septic system owners about pollution causes 3. Evaluate the cost of developing a septic system brochure mailer to go out to all septic system supported properties in the County, outside of City UGBs.	Ongoing	LMD Manager	Confirm all applicants for new, or alteration and repair permits, receive outreach material and report the number of septic system maintenance brochures/handouts distributed	Lane County distributed 389 brochures for new and modified septic permits during this reporting year.
									LMD Manager ECS Manager	Report effort involved in developing and sending mailer and associated costs by December 2022.	Due to COVID19 and limited resources, we have not been able to start this effort. Staff will work on this in the coming year. Planning is moving toward a website instead of a flyer with the expectation that this will have a greater potential to reach more people.
1 & 3	C-4 Discourage illegal discharges and roadside dumping and respond to incidents	Bacteria, Mercury, Temperature	Solid / Domestic Waste, Industrial waste	Execution of illegal dumping and illicit discharge detection response program	Illegal Dumping/Illicit Discharge Response Nuisance LC 9.945, 9.9456, and 5.747	Countywide	1. Respond to illegal dumping and illicit discharge complaints 2. Impose penalties to violators	Ongoing	WMD manager RMD Manager PD Manager LMD Manager ECSD Manager	Report the number of illicit discharge incidents and document follow-up and enforcement actions	Lane County responded to 24 complaints County-wide associated with illicit discharges, seven of which were deferred to the Cities of Eugene and Springfield through our NPDES IGAs and an additional ten were responded to by the Cities without County involvement. Overall 22 incidents were located within the Willamette River TMDL area under Lane County's jurisdiction and three enforcement letters were issued; all three enforcement letters were issued for violations on private property and resulted in illicit discharge cleanup by the third party.
										Report the number of illegal dumping incidents and document follow-up and enforcement actions.	Lane County received 704 illegal camping and/or dumping incidents and had follow-up discussions with 50 individuals. Lane County staff collected 281,600lb of trash, 200 gallons of household hazardous waste, and issued 14 citations for illegal camping and/or dumping during the reporting year.
							3. Update County Illicit Discharge Code and enforcement procedures	In the next 5 years.		Report the number of penalties.	Lane County issued three enforcement letters for illicit discharges and 14 citations for illegal camping and/or dumping during the reporting year.
3	C-5 Enforce and administer illicit discharge, detection, response, and enforcement programs inside the UGB through partnership with the cities of Eugene and Springfield	Mercury, Bacteria, Temperature	Solid Waste, Industrial Waste	Prevention of illicit discharges through local codes	Illicit discharge detection and elimination activities	Inside Springfield UTZ boundary	1. Implement city ordinances for illicit discharge through City County Intergovernmental Agreement with City of Springfield, provide administrative assistant for compliance	Ongoing (unless IGA is not renewed)	DPW Director ECSD Manager	Work in partnership to report the number of illicit discharges responded to and administered by the City within the UTZ	Lane County is continuing to work with the City of Springfield to identify which illicit discharges occurred within the UTZ. The County coordinated with the City of Springfield for two illicit discharge responses and the City responded to an additional seven incidents within County jurisdiction through the IGA for a total of eight responses.
						Inside Eugene UGB boundary	2. Implement city ordinances for illicit discharge through City County Intergovernmental Agreement with City of Eugene		EPWD Manager ECSD Manager	Work in partnership to report the number of illicit discharges responded to and administered by the City within the UGB	Lane County is continuing to work with the City of Eugene to identify which illicit discharges occurred within the UGB. The County coordinated with the City of Eugene on five illicit discharge responses within County jurisdiction through the IGA; one additional illicit discharge reported to the County occurred within the city limits of Eugene and was responded to by the City of Eugene.
(D) Erosion and Sediment Control During Construction											
4	D-1 Implement erosion and sediment control regulations to minimize or stop soil erosion and reduce sediments from entering waterbodies	Mercury Bacteria	Sediments	Regulated development activities through ordinances	City of Springfield Erosion and Sediment Control Program	Inside Springfield UTZ boundary	1. Implement City of Springfield's Erosion and Sediment Control Program through City/County IGA	Ongoing, (unless IGA is not renewed)	DPW Director ECSD Manager	Report the number of erosion control permits issued in the UGB by the City of Springfield.	The City of Springfield's Land Drainage and Alteration Permit (LDAP) program continues to provide erosion and sediment control enforcement and compliance within the UGB per our NPDES IGA and County Code. There were 665 inspections completed at 134 project sites (Page 15 of the City's TMDL Report) during the reporting year. Two inspections occurred within the UGB/UTZ.
					City of Eugene Erosion Prevention and Construction Site Management Plan	Inside Eugene UGB boundary	2. Implement City of Eugene's Erosion Prevention and Construction Site Management Plan through City/County IGA	Ongoing (unless IGA is not renewed)	EPWD Manager ECSD Manager	Report City of Eugene's Erosion Prevention and Construction Site Management Program activities	Lane County is working with the City of Eugene to better document the inspections that occurred within the UGB. At this time, please review the City of Eugene's TMDL as it is not available to us prior to submittal of our report. Erosion prevention is the focus of our stormwater program in this coming fiscal year and we hope to get this documentation in order prior to the next reporting year.
					County Stormwater Program	Countywide	3. Develop erosion and sediment control regulations to meet the NPDES MS4 Phase II Permit and WR Hg TMDL	2023	ECSD Manager LMD Manger	Report on hours spent on development through Activity Code P4422 NPDES Erosion Control	Lane County records indicate 455.20 hours charged to Activity Code P4422 for NPDES Erosion Control across all divisions.
							4. Develop Countywide Erosion Prevention Code.	Ongoing	ECSD Manager LMD Manager	Report on hours spent on erosion prevention related activities through Activity Code P4422 NPDES Erosion Control and/or Number of meetings held on the subject.	Lane County records indicate 455.20 hours charged to Activity Code P4422 for NPDES Erosion Control. Staff coordinated and/or attended 38 meetings related to Erosion and Sediment Control during the reporting year. These meetings involved the development of erosion control requirements, updating right-of-way facility permit requirements, and coordination with regional partners to streamline approaches to Erosion and Sediment Control.
								2023		Report on progress made to adopt updated erosion prevention code by December 2023.	County Code is to be adopted by September 2023. Lane County staff currently have a decision tree to guide citizens when obtaining erosion control permits and a drafting of ordinance is under way. Future efforts will involve developing external guidance documents for public comment, internal staff training, and ordinance adoption. Additionally, the Board of County Commissioners approved a new stormwater permitting specialist position in the Land Management Division for 2022-2023 fiscal year to support the erosion prevention permit implementation.
								Starting in 2024 then on-going	LMD Manager	List the number and type of erosion prevention permits issued. Each erosion prevention permit type is described in the decision tree in the attached Exhibit A.	Lane County's current plan is to start issuing permits in early 2024. Work toward approval of ordinances and permitting processes is underway. The 2022 Lane County Implementation Plan includes Exhibit A which is the draft permit decision tree.

NPDES MS4 Phase II C.M.	Strategy (Lane County Actions)	Target Pollutant	Pollution Source	Measurable Goals (Indicator of Progress)	Program Description (Policy reference)	Monitoring Scope	Actions	Timeline/ Frequency	Responsible Division/ Funding Source(s)	How (Measures)	Annual Reporting (July 2021 -June 2022)
4	D-2 Review County erosion and sediment BMPs annually and incorporate new BMP measures as they become available.	Mercury Bacteria	Sediment	Incorporation of new erosion control related BMPs into road maintenance activities	Water Quality & Habitat Guide, Best Management Practices Road Maintenance Manual	Countywide	1. Review new construction BMPs and add to County Road Maintenance Practices	Ongoing	RMD Manager	Report reviews of BMPs	Supervisors review BMPs with crews annually, and provide additional reviews as needed seasonally based on the type of work to be performed.
										Report new BMPs implemented based on ODOT's Routine Road Maintenance Water Quality and Habitat: Best Management Practices "blue book" (updated every 5 years).	ODOT developed a new "blue book" manual in 2021 and a brief review indicated no significant changes from the previous version. Lane County is planning to review a potential need for updates to Water Quality and Habitat Guidelines in the future.
4	D-3 Track the number of development applications that disturb one acre or more.	Mercury Bacteria	Sediment	Refer development applications that disturb one acre or more to DEQ to assist with their 1200-C permit compliance program.	Permit compliance 1200-C Permit Program Grading excavation and clearing codes LC 16.005 Natural Resources District LC 16.213, LC 10.250	Countywide	1. Refer to DEQ when a development proposal impacts more than one acre land	Ongoing	LMD Manager	Report the number of 1200-C applications referred to DEQ annually.	The Lane County Land Management Division referred thirteen 1200-C applications to DEQ in the reporting year.
4	D-4 Implement erosion and sediment control BMPs for County construction projects.	Mercury	Sediment	Track the number of County construction projects that incorporate erosion and sediment control BMPs	1200 CA Permit Program, Capital Improvement Program	Countywide	1. Implement BMP M.2.A.1 to countywide construction projects	Ongoing	ECSD Manager RMD Manager WMD Manager PD Manager	Report the number of capital improvement projects utilizing erosion and sediment control BMPs.	Lane County had four capital improvement projects that utilized erosion and sediment controls during the reporting period. These included a project that installed two fish passage culvert replacements, a multi-use path project, a slope stabilization project, and a landfill expansion project.
										Report any contractor corrective actions incorporated in the projects	Lane County noted one corrective action with a contractor during the reporting year.
(E) Stormwater Planning and Programs, Structural Collection and Treatment of Stormwater											
5	E-1 Implement, manage, and maintain a post construction stormwater system program.	Temperature, Mercury, Bacteria	Sediments, stormwater runoff, heavy metals, hydro-carbons	Regulated development activities through ordinances	County Stormwater Program	NPDES MS4 Phase II Urbanized Area Outside of City UGBs	1. Develop post construction stormwater regulations to meet the NPDES MS4 Phase II Permit.	2023	ECSD Manager	Report on hours spent on development through Activity Code P4412 Stormwater program work and P4423 NPDES SW Facilities	Lane County dedicated 975 hours to general Stormwater Program Work (Activity Code P4412) and an additional 330.5 hours to NPDES SW Facilities (Activity Code P4423) during the reporting year.
5	E-2 Partner with the City of Springfield on Post-Construction/Development Regulations within County areas of the UGB	Temperature Mercury Bacteria	Sediments, stormwater runoff, heavy metals, hydro-carbons	Administration of a post-construction stormwater system maintenance, inspection, and compliance program that ensures stormwater management systems are operated and maintained consistent with local regulations.	Intergovernmental Agreement with City of Springfield	Springfield UGB boundary	2. Implement city's Post-Construction Water Quality Facility management Program inside the City's UGB	Ongoing (Unless IGA is not renewed)	DPW Manager ECSD Manager	Report on IGA partnership achievements.	The County negotiated an extension to our IGA with the City during this reporting window. The current City of Springfield NPDES IGA expires on March 31st, 2024. Lane County continues to collaborate with the City of Springfield on Public Education and Outreach, management of Illicit Discharges, outfall inventory and tracking, and Post-Construction Stormwater System Maintenance Inspections and Compliance, among other measures.
6	E-3 Partner with the City of Eugene on development standards within County areas of the UGB	Temperature Mercury, Bacteria	Sediments, runoff	Administration of stormwater development standards program that ensures private stormwater management systems are designed and installed consistent with local regulations	IGA with City of Eugene	MS4 boundary	1. Maintain stormwater IGA partnership with the City of Eugene to maintain consistency with development standards.	Ongoing	EPWD Manager ECSD Manager	Report on IGA partnership achievements.	The County negotiated an extension to our IGA with the City during this reporting window. The current City of Eugene NPDES IGA expires on December 31, 2023. Lane County continues to collaborate with the City of Eugene on Public Education and Outreach, management of Illicit Discharges, Erosion and Sediment Control, and Stormwater Master Plans, among other measures.
5 & 6	E-4 Prioritize Low Impact Development (LID) options when upgrading County facilities such as construction of stormwater bioswales and preservation of riparian areas from development activities.	Mercury Temperature Bacteria	Sediments Stormwater runoff	Documentation of County projects considered for LID options	Capital Improvement Program, Road Maintenance Program	Countywide	1. Document design concept process	Project by project basis	ECSD Manager RMD Manager WMD Manager PD Manager	Report the number of County projects planned and/or developed with LID options	Lane County has two projects planned for 2023 summer construction with LID infrastructure. The Howard Elementary School Safe Routes to School project will have vegetated planters, while the Vaughn Road MP 8.8 Culvert Replacement project will likely include a bioswale. Two additional water access projects at Forest Glen and Howard Buford Recreation Areas are expected to contain LID infrastructure but are in early planning phases with infrastructure currently unknown.
5 & 6	E-5 Implement Low Impact Development requirements for new private developments in the Goshen area as part of the Goshen Region Employment and Transition (GREAT) Plan	Mercury Temperature Bacteria	Sediments, heavy metals, hydro-carbons, industrial waste	Implementation of LID stormwater standards for development proposals in LC 16.280	GREAT Plan, Lane Code 16.280	Goshen region	1. Review development proposal consistent with applicable stormwater standards outlined in LC 16.280	Project by project basis	LMD Manager ECSD Manager	Report the number of land use, building, and septic permit issued in the Goshen area	Lane County reported eight land use, building, and/or septic permits issued in the Goshen area during the reporting cycle.
										Report the number of water quality facilities permitted with building permits	Lane County records indicate that no water quality facilities were permitted during the reporting year.

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6	E-6 Develop and maintain stormwater conveyance system outfall maps to track and locate problems more efficiently	Mercury, Temperature, Bacteria	Illicit discharges	Development of stormwater mapping application to aid illicit discharge detection	Mapping Program	Countywide	1. Continue developing GIS-based stormwater mapping tools	Ongoing	ECSD Manager RMD Manager	Report GIS tools/applications under development and use	The Lane County Road Maintenance division uses two GIS Mobile Applications, one to track stormwater infrastructure locations, modifications, repairs, and maintenance, and one to track herbicide use, noxious weeds, and Threatened and Endangered species information. A stormwater collector application for stormwater infrastructure planning and analysis continues to be in the works. A transition involved with an asset management program caused difficulties and setbacks, putting this effort on hold temporarily.
1	E-7 Conduct public education and outreach on stormwater quality for activities such as illegal discharge/dumping, pet waste, riparian, and wetland protection	Mercury, Temperature, Bacteria	All types	Education and outreach through material distribution and events for various pollutants and target groups	IGA with City of Springfield and City of Eugene	MS4 boundary and Countywide	1. Participate in regional education and outreach groups; look for opportunities to distribute materials to county residents	Ongoing	ECSD Manager	Report the type of outreach and the number of outreach materials distributed, developed, or updated to support outreach	Lane County outreach and education efforts were primarily done in conjunction with conditions outlined in the IGA with the Cities of Eugene and Springfield. Lane County was involved in 139 outreach activities during the reporting year. Through IGAs with the Cities of Eugene and Springfield, an additional 42 educational activities were completed within the UGB areas of those cities. These efforts resulted in 181 outreach activities during the reporting year. Stormwater educational material was included in the Annual Floodplain Letter for Lane County which was sent to approximately 10,000 floodplain property owners across the County. In addition, The Waste Management Division provided 45 tours focused on waste reduction, reuse, and recycling during the reporting year.
										Report webpage engagements	Lane County recorded 665 visits to the County's main Stormwater Management Overview page and 354 visits to links within the page that contain information about spill cleanup and reporting, the Willamette River TMDL program, stormwater permitting and code references, annual reports, and the River Road Santa Clara Stormwater Basin Master Plan.
6	E-8 Sponsor county employees to attend stormwater training	Mercury Temperature Bacteria	All types	Number of County employee receiving stormwater training	Training Program	Countywide	1. Provide employees opportunities to attend stormwater trainings	Ongoing	ECSD Manager RMD Manager LMD Manager WMD Manager PD Manager FD Manager	Report the number of stormwater related trainings staff attended	Staff attended 12 trainings throughout the reporting year. Topics covered in external trainings included: effective utility management methods, erosion control summit training, 6PPD overview, PFAS overview, SWQF maintenance overview, pervious pavement, overview of Mercury/Methylmercury, WQ facility efficacy and LiDAR GIS models, in-stream channel restoration, Private Forestry Accord to support water quality and ESA listed species, code review for LID and proprietary device maintenance, zinc source tracking, MS4 Ph II permitting, UIC permitting, and SFR funding and SW updates. Some trainings covered multiple topics.
6	E-9 Have appropriate staff attend DEQ TMDL meetings	All	All pollution sources	Keep up to date on TMDL issues, policies, and programs	Stormwater Program	Countywide	1. County staff attend TMDL related activities	Ongoing	ECSD Manager	Report TDML meetings attended	Lane County staff attended eight TMDL related meetings hosted by, or in collaboration with, DEQ during the reporting year. County staff attended 43 additional meetings regarding the TMDL during the reporting year. The reduction in meetings this permit term was due to a high number of meetings associated with post-Holiday Farm fire recovery meetings during the prior reporting year.
6	E-10 Maintain a stormwater management program within the Public Works Department.	All	All pollution sources	Maintain consistent internal stormwater related polices and procedures and have staff whose partial or primary role is dedicated to the stormwater program	Stormwater Program	Countywide	1. County staff attend Stormwater Committee Meetings. 2. County Staff attend Stormwater Policy Team Meetings.	Ongoing	ECSD Manager LMD Manager WMD Manager RM Manager PD Manager	Report the number of part-time and full-time staff dedicated to working on the stormwater program.	Lane County has full time staff who are tasked with intermittent stormwater related activities as a portion of regular operation and maintenance in Parks, Land Management, and Waste Management Divisions. Full time appointments vary seasonally in the Roads Division with 2 full-time Vactor Truck operators who primarily work full time in stormwater related work for most of the year and scale back to 1/2 FTE during winter. The Roads Division also contains a Natural Resource Specialist who works in stormwater related work at 1/4 FTE. The Land Management division contains three part-time staff who dedicate 1/8 FTE each to stormwater code updates. This year Land Management got approval to add its first full time FTE for a stormwater permitting specialist. The Engineering and Construction Services Division got approval for the addition of a staff member during the creation of the Environmental Engineering group. This group includes one 1/2 FTE for the Environmental Engineering Supervisor, and 2 FTE for the Stormwater Coordinator and Stormwater Technician positions. During the reporting year we had the supervisor and the technician positions filled. In the next reporting year, we have two additional positions approved and are working to hire those positions.
									ECSD Manager	Report the number of Stormwater Policy Team meetings held.	Lane County's Stormwater Policy Team met three times this reporting year.
										Report the number of stormwater committee meetings held.	Lane County's Stormwater Committee met two times this reporting year.
							3. Evaluate the feasibility of developing a stormwater utility fee within the County.			Report the number of hours spent on the stormwater utility feasibility study.	Lane County spent 47.05 hours studying the stormwater utility fee feasibility during this reporting year, including $106,000 expenditure in consulting fees and a presentation to the Board of Commissioners in September of 2021.
(F) Education and Outreach, Public Involvement											
1	F-1 Develop and distribute stormwater/water quality materials such as brochures, factsheets, mailers, signage, and web pages	Bacteria Temperature Mercury	All pollution sources	Keeping County residents informed about stormwater related information, activities, and policies	Lane Manual	Countywide	1. Use appropriate media to communicate with the community regarding various stormwater programs	Ongoing	ECSD Manager	Report on materials distributed	Lane County updated its stormwater website, focused on providing links to outreach materials developed by the Oregon Association of Clean Water Agencies, and developed, edited and updated GIS infrastructure data on the Lane County public web viewer. The Stormwater Committee continues to work on updating existing codes and drafting new codes that will be adopted to coincide with updating detailed IGA's with municipalities for increased coordination. The County presented multiple public presentations to the Board of County Commissioners, provided stormwater quality informational letters to FEMA floodplain property owners (10,000 letters distributed), provided public presentations on waste reduction, reuse, and recycling (45 presentations), and continues to collaborate with the cities of Eugene and Springfield on clean water initiatives and informational.
										Update stormwater webpage	Lane County updated several items on its stormwater web page to better interface with the public. Improvements made during this reporting year included GIS updates to show stormwater quality facilities and inclusion of links to updated stormwater permitting code and references.
6	F-2 Pursue and implement mutual stormwater strategies of interest with other jurisdictions	Bacteria Temperature Mercury	All pollution sources	Execute and renew intergovernmental agreements as appropriate	IGA with partners	MS4 boundary	1. Look for opportunity to collaborate on stormwater issues and projects of mutual interest	Ongoing	ECSD Manager	Report hours spent collaborating with other jurisdictions using (P4220 Coordinate with Region Partners)	Lane County recorded 45.5 hours of coordination for Activity code P4220 during the reporting year, and an additional 28.5 hours were dedicated to regional meetings, development of IGAs, and collaborative efforts/discussions with regional partners. The number of hours dedicated to this activity code decreased from the prior reporting year due to a high number of meetings associated with post-Holiday Farm fire recovery efforts during the prior reporting year.

NPDES MS4 Phase II C.M.	Strategy (Lane County Actions)	Target Pollutant	Pollution Source	Measurable Goals (Indicator of Progress)	Program Description (Policy reference)	Monitoring Scope	Actions	Timeline/ Frequency	Responsible Division/ Funding Source(s)	How (Measures)	Annual Reporting (July 2021 -June 2022)
1 & 2	F-3 Conduct stormwater quality and riparian protection outreach via methods such as , workshops, event hosting, fairs in partnership with the cities	Bacteria Temperature Mercury	All pollution sources	Collaboration with and participation in events such as workshops, fairs, and tradeshows hosted by agencies	IGAs with the partner cities	MS4 boundary	1. Participate in planning and development of regional events	Ongoing	ECSD Manager	Report the number of events participated	Lane County was involved in 139 activities that involved public outreach to target audiences across the County. Through our IGAs with the cities of Eugene and Springfield an additional 42 educational activities were completed within the UGB areas of those cities. These efforts resulted in a total of 181 outreach activities during the reporting year.
1	F-4 Inform animal and pet owners about bacteria pollution issues associated with improper waste disposal	Bacteria	Animal waste	Look for opportunities to distribute educational materials outlining proper care of domestic and other animal waste	NPDES	Countywide	1. Distribute brochures at applicable locations 2. Update the County Website 3. Post signs at park facilities	Ongoing	PD Manager	Report the location, type, and number of educational materials distributed/posted publicly	Lane County purchased 10,000 pet waste bags during the reporting year. Prorated for the percentage of dispensers located within the Willamette Basin (26 of 35 stations), the County purchased 7,428 bags for Willamette Basin parks during the reporting year. Bag dispensing stations include signage regarding the handling of pet waste. Additionally, rules regarding removal of dog waste are listed on the Lane County Parks Division website.
1	F-5 Inform County residents about TMDL program and activities	Bacteria Temperature Mercury	All pollution sources	Post TMDL Implementation Plan on website	TMDL	Countywide	1. Maintain stormwater website	Ongoing	ECSD Manager	Report website visits to the Stormwater Program website.	During the reporting year, Lane County had 665 visits to the County's main Stormwater Management Overview page and 354 visits to links within the page that contain information about spill cleanup and reporting, the Willamette River TMDL program, stormwater permitting and code references, annual reports, and the River Road Santa Clara Stormwater Basin Master Plan.
										Report on updates and maintenance activities to the stormwater program website.	Lane County updated several items on the stormwater web page to better interface with the public. Improvements made during the reporting year included GIS updates to show stormwater quality facilities and inclusion of links to updated stormwater permitting code and references. The web page contains links to TMDL information, including Lane County's TMDL Implementation Plan and TMDL annual reports. TMDL links received 58 visits during this reporting year.
1	F-6 Educate the public on proper hazardous waste disposal	Mercury Bacteria	Solid waste	Incorporate hazardous waste collection and disposal information in educational materials, such as newsletters and brochures	Household Hazardous Waste Collection Program	Countywide	1. Distribute hazardous waste disposal educational materials during collection activities and/or other events.	Ongoing	WMD Manager	Report the number of educational materials distributed.	Lane County's Waste Management Division provided 45 presentations and tours focused on waste reduction, reuse, and recycling and provided technical assistance regarding waste management to 50 businesses and ten active construction projects.
1	F-7 Evaluate public education efforts	Bacteria Temperature Mercury	All pollution sources	Evaluate public education and outreach program	NPDES/TMDL	Countywide	1. Evaluate one education and outreach efforts per TMDL implementation plan timeframe.	2024	ECSD Manager	Report on evaluation efforts and results.	Staff evaluated and made updates to our stormwater quality protection plan handout which is given to facility permit applicants when they are requesting to do work within the County Rights-of-Way near a water quality facility. It was initially created in July and then updated in April after evaluation. Additionally we updated our IGAs with Eugene and Springfield which involved checking in on all four control measures involved in the IGAs and making adjustments as needed.
1	F-8 Increase Board awareness of TMDL requirements and Plan	Bacteria Temperature Mercury	All pollution sources	Educate board on TMDL and NPDES MS4 Phase II permit requirements	NPDES/TMDL	Countywide	1. Look for opportunities to communicate with the board on the TMDL and NPDES MS4 Phase II Program with the goal of at least one presentation to the board during the implementation plan timeframe	Ongoing	ECSD Manager	Report on the number of educational efforts conducted to inform the board on the TMDL and NPDES MS4 Phase II programs.	Lane County stormwater staff presented to the Board of County Commissioners four times during the reporting year, one time to present findings for a stormwater utility fee, and three times to present and adopt illicit discharge code.

Acronyms:
ASD: Administrative Services Manager (Lane County)
BMP: Best Management Practices
DPW: Springfield Development and Public Works
ECSD: Engineering and Construction Services Division(Lane County)
EPWD: Eugene Public Works Department
FD: Fleet Division (Lane County)
IGA: Intergovernmental Agreement
LC: Lane Code
LID: Low Impact Development
LMD: Land Management Division (Lane County)
MMS: Maintenance Management System (Lane County)
MPG: Mileage per gallon
MS4: Municipal Separate Storm Sewer System
PD: Parks Division (Lane County)
RRM: Routine Road Maintenance Manual (ODOT)
TMDL: Total Maximum Daily Load
UGB: Urban Growth Boundary
UTZ: Urban Transition Zone
WMD: Waste Management Division (Lane County)
WSC: Watershed Council