

**OAK LODGE WATER SERVICES**  
**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**  
**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT**

**Permit No. 101348**

**ANNUAL REPORT**  
**FY 2023-2024**  
**November 25, 2024**

This annual compliance report for the MS4 Discharge Permit No. 101348 is submitted in accordance with Schedule B, Condition 5 of the permit. As required by 40 CFR Section 122.22, I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

*Brad Albert*

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Brad Albert, General Manager

11/25/2024

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Date

*Prepared by Oak Lodge Water Services Technical Services Department*





**2023-2024  
Annual Report**

for  
National Pollutant Discharge Elimination System (NPDES)  
Municipal Separate Storm Sewer System (MS4)  
Permit Compliance  
Permit #101348

**Prepared by:**  
Oak Lodge Water Services, Technical Services Department

November 2024

**2024 Oak Lodge Water Services  
October 2021 MS4 Permit  
ANNUAL REPORT REQUIREMENTS**

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## 1. Background

The Board of Directors of Oak Lodge Sanitary District (OLSD) created a Surface Water Management program with the adoption of Ordinance 1001 in May of 1993. The purpose of the Surface Water Management Program is to:

- prevent pollutants from entering rivers, lakes, and streams;
- maintain and/or improve water quality; and
- restore or enhance properly functioning conditions in the watersheds.

Program development officially began on July 1, 1993, with the collection of Surface Water Management fees based on impervious surface area.

On January 1, 2017, Oak Lodge Sanitary District and Oak Lodge Water District officially consolidated into Oak Lodge Water Services (OLWS). Prior to this consolidation, Oak Lodge Sanitary District passed Resolution (16-12) assigning all assets and obligations to the Oak Lodge Water Services. Oak Lodge Water Services understands that it must meet the obligations that OLSD made for the MS4 Permit. In 2023, OLWS became an Authority, which is a type of special district that holds its assets, duties, and boundaries in perpetuity, including the requirements of the MS4 Permit.

### Permit History

Under the federal Clean Water Act (CWA) and Oregon Revised Statute 468B.050, Oregon Department of Environmental Quality (DEQ) has issued the Oak Lodge Water Services (OLWS) a renewed National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Phase I Discharge Permit, effective October 1, 2021.

OLWS is a co-permittee on the Clackamas County NPDES MS4 Permit, along with 11 other agencies. The first permit (101348) was issued in 1995. A second permit was issued in 2005 after an appeal and a modification. A third permit was issued in 2012, expired in 2017 and went into administrative extension until a renewed permit with an effective date of October 1st, 2021, and a modified monitoring plan approved effective May 5, 2023.

The 2022 version of the OLWS's Stormwater Management Plan (SWMP) was developed based on a review and evaluation of the OLWS's stormwater management program, including activities and accomplishments implemented during the previous permit term and during the administrative extension period. The OLWS has used an adaptive management process to assess and modify, if necessary, best management practices (BMPs) to achieve reductions in stormwater pollutants to the maximum extent practicable. The SWMP modifications consider available technologies and practices; review of measurable goals and tracking measures; and evaluation of resources available to implement programs.

The BMPs are evaluated annually during the preparation of the NPDES MS4 Annual Report. The annual reports include the status of implementing each BMP and any proposed modifications or adaptations to the program.

This Annual Report describes activities related to implementation of the OLWS's NPDES MS4 Permit and the SWMP. The SWMP contains BMPs, which outline the specific tasks that the OLWS will conduct to prevent and reduce stormwater pollution to the maximum extent practicable to protect water quality and satisfy the requirements of the NPDES MS4 Permit and the CWA.

**Table 1 – Highlighting the 2021 NPDES MS4 Annual Reporting Requirements**

<b>Annual Reporting Requirements from Schedule B.3.a. - I.</b>	<b>Location in document</b>
a. The status of implementing the Stormwater Management Program (SWMP) and each control measure program element in Schedule A.3, including progress in meeting the measurable goals and program tracking and assessment metrics identified in the SWMP Document as well as additional annual reporting requirements identified in each section, or, prior to SWMP Document approval by DEQ, measurable goals and tracking metrics approved under the previous permit's approved SWMP.	Section 3
b. A summary of the adaptive management implementation and any changes or updates to programs made during the reporting year, including rationales for any proposed changes to the SWMP (e.g., new BMPs), and review of related new and historical monitoring data. This summary should also include discussion of the implications of, or any findings related to recent years' adaptive management and/or changes made to the SWMP Document, based on data from tracking measures, measurable goals, and/or any monitoring related to the change.	Section 5
c. Any proposed changes to SWMP program elements that are designed to reduce Total Maximum Daily Loads (TMDL) pollutants.	Section 6
d. A summary of education & outreach and public involvement activities, progress toward or achievement of measurable goals, and any relevant assessment of those activities. This should include planned adaptive management or other program enhancements to occur in the following years.	Section 4
e. 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.	Appendix A
f. A list of entities referred to DEQ for possible 1200-Z NPDES general permit coverage based on co-permittee screening activities, a list of categories of facilities inspected, and an overview of the results of inspections of commercial and industrial facilities.	Appendix A
g. A summary of total stormwater program expenditures and funding sources over the reporting fiscal year, and any anticipated in the next fiscal year.	Section 7
h. A summary of monitoring program results, including monitoring data that are accumulated throughout the reporting year submitted in the DEQ-approved Data Submission Format, and any assessments or evaluations of that data completed by the co-permittees or an authorized third party.	Appendix B
i. Any proposed modifications to the monitoring plan are necessary to ensure that adequate data and information are collected to conduct stormwater program assessments.	Section 9
j. An overview, as related to MS4 discharges, of concept planning, land use changes and new development activities (including the number of new post-construction permits issued) that occurred within the Urban Growth Boundary (UGB) expansion areas during the reporting year, and those forecast for the following year, where such data is available.	Section 11
k. The details of all corrective actions implemented associated with Schedule A.1.b.iii during the reporting year.	Appendix A
l. Additional Annual Report requirements for 2024:	Appendix C

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| <ul style="list-style-type: none"><li>• Updated Stormwater Code – OLWS Design and Construction Standards – to address requirements in Schedule A.3.e.</li></ul> |  |
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## **2. Report Organization**

This report is organized based on the requirements of the October 2021 NPDES permit, Schedule B.5.a through B.5.l. The numbers listed after the report headings indicate the portion of the permit schedule that the section addresses. The report covers the activities of OLWS from July 1, 2023 to June 30, 2024. Information about implementation of required BMP's is summarized in Appendix A. Lastly, the DEQ Grab Data Submission Table summarizes water quality sampling activities in Appendix B. Brief summaries of each topic are described in this document.

## **3. Status of SWMP Program Document, Information, Metrics (A.2.c-d)**

The Oak Lodge Water Services implemented the current Surface Water Management Program (SWMP) in 2022, based on the current requirements of the 2021 MS4 Permit. For this annual report, implementation of the SWMP is being reported based on the requirements in the current permit (No. 101348). This information is summarized in this Narrative and in Appendix A of this report.

## **4. Status of Public Education Programs (A.3.a)**

OLWS uses multiple avenues to educate the public about the importance of surface water protection.

OLWS includes bi-monthly newsletters in our bills and posts the same information on our website and social media. OLWS partners with multiple agencies and non-profits to support public outreach and education focused on stormwater.

Over time, OLWS has created, supported, and implemented a variety of programs and partnerships to provide outreach to the community about surface water issues. Partnerships include:

- Ecology in Classrooms & Outdoors (ECO)
- Clackamas Community College Environment Learning Center (CCC ELC)
- Regional Coalition for Clean Rivers and Streams (Coalition)
- North Clackamas Park and Recreation District (NCPRD)

Ongoing public education through programs include:

- Backyard Habitat Certification Program with Portland Audubon and Columbia Land Trust
- OLWS Stormdrain Cleaning Assistance Program
- OLWS Wastewater Treatment Plant Tours

### **Stormdrain Cleaning Assistance Program (SCAP)**

The Stormdrain Cleaning Assistance Program helps businesses maintain their parking lot drains at a discounted price, removing contaminants and preventing flooding. The image below is the Stormdrain

Cleaning Assistance Program Postcard. We implemented the use of QR codes to make it easy for customers to sign up online via an online form.



### Stormdrain Cleaning Assistance Program

Stormdrains discharge rainwater to local streams, they require regular maintenance to remove contaminants and prevent flooding. OLWS coordinates the Stormdrain Cleaning Assistance Program to help businesses maintain their parking lot drains at a discounted price at **\$60 per drain flat fee**. Register at [OakLodgeWaterServices.org/scap](https://OakLodgeWaterServices.org/scap).

Deadline is October 31, 2023. Questions? Contact [alexa.morris@olws.org](mailto:alexa.morris@olws.org) or by text/call (503) 353-4219.



### Wastewater Treatment Plant Tours

In-person customer tours resumed in Summer 2023 and 2024. OLWS had 7 tours between July 1, 2023 – June 30, 2024.

### Backyard Habitat Certification Program

OLWS partners with the Backyard Habitat Certification Program (BHCP) to support urban gardeners in their efforts to create natural backyard habitats. This includes working with homeowners to find stormwater solutions in their yards to mimic nature by allowing runoff to soak into the ground, helping to filter out pollutants and decrease or eliminate runoff on their property. In 2023-24 in the OLWS Service Area, BHCP visited 28 properties and 5 were certified.

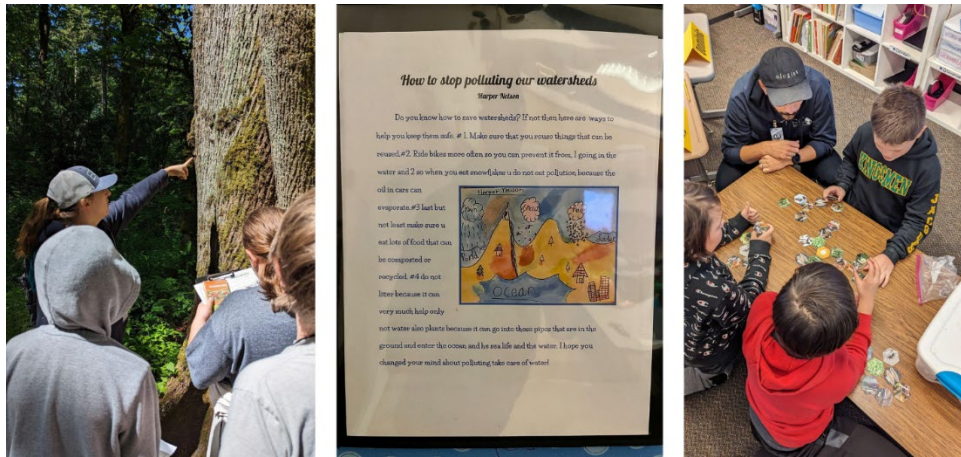


**Figure 1: Oak Grove resident Jenna with her Backyard Habitat certification**

### Ecology in Classrooms & Outdoors (ECO)

This year's ECO programming engaged approximately 400 students across Oak Grove Elementary, View Acres Elementary, Candy Lane Elementary, Riverside Elementary, New Urban High, and Rex Putnam High, totaling 2,100 contact hours. ECO educators delivered 44 indoor lessons, 20 outdoor lessons, and 25 walking field trips.

At Oak Grove Elementary, View Acres Elementary, New Urban High, and Rex Putnam High, ECO reached about 270 students. These students learned a broad range of ecology topics and participated in activities like planting native plants and visiting local parks. Feedback from students showed that 79% believed kids can change the environment's health, and 94% liked nature. One student said, "I like ECO because it is important to teach kids about our planet," while a teacher appreciated the program's hands-on activities and multiple lesson structures.



**Figure 2: Ecology in Classrooms & Outdoors student activities and field trips**

### **Aves Compartidas**

Aves Compartidas provides Spanish immersion and dual language classroom lessons on ecology, restoration and land use, and offers field experiences where students engage in habitat enhancement projects. Programming supports the teachers and students at three dual language elementary schools:

Candy Lane Elementary (4 classrooms), Riverside Elementary (3 classrooms), and Milwaukie El Puente Elementary (9 classrooms). This year the program at Candy Lane Elementary and Riverside Elementary reached 130 students. At Riverside, the program integrated into dual language classrooms for 3rd-5th grades, focusing on migratory birds like the rufous hummingbird, yellow warbler, and great blue heron, which are indicator species for water quality.



**Figure 3: Aves Compartidas students working on migratory bird projects**

Candy Lane's fourth graders focused on the yellow warbler and presented their projects at the year's end.

### **Clackamas Community College Environmental Learning Center (CCC ELC)**

This winter the Environmental Learning Center presented Livestream episodes to K-5 students. Each of ten episodes focused on wetland ecology, wildlife, and watershed health. Student activity sheets were developed to engage students in the content; each program has an accompanying sheet. Programs aligned with Next Generation Science Standards (NGSS).

Teachers were provided recordings of the sessions in addition to links for joining the LIVE events. This enabled them to view the presentation at a time that was convenient for them. Two episodes were delivered each week, one for grades K-3 (Wild About Water) and the other for grades 4-5 (Wild in the Wetland), which totaled in 10 livestream classes. Highlighted below are some topics that were featured:



- Beavers, Nature's Builders: January 30, 2024, with 52 students
- Hurray for Herons!: February 13, 2024, with 52 students
- Coyote, Your Wildlife Neighbor: February 27, 2024, with 52 students
- Fun with Frogs: March 12, 2024, with 52 students
- Darting Dragonflies: April 9, 2024, with 52 students

The CCC ELC also offers three field trips that immerse students in discovering and exploring the beautiful wetland and forest ecosystems. All field trips are two hours long. Field trip activities include:

- Learning about wetland inhabitants and solving wildlife mysteries
- Discovering macroinvertebrates in the wetland
- Measuring the quality of water in our wetland

School (field trip)	Grade	# of students
Candy Lane Elementary ( <i>Healthy Watersheds</i> )	5 <sup>th</sup> grade	62
Oak Grove Elementary ( <i>Discovering Wetland Wildlife</i> )	1 <sup>st</sup> grade	40
Riverside Elementary ( <i>Healthy Watersheds &amp; Welcome Home</i> )	3 <sup>rd</sup> , 4 <sup>th</sup> , and 5 <sup>th</sup> grades	174
View Acres Elementary ( <i>Welcome Home</i> )	3 <sup>rd</sup> grade	54

### **Regional Coalition for Clean Rivers and Streams (Coalition)**

OLWS is active with the Regional Coalition for Clean Rivers and Streams (Coalition). The Coalition continued its work – initiated in the late 1990s – of providing coordinated messaging about area water health and residential behaviors linked to stormwater pollution from across the Portland metropolitan region in Washington, Multnomah, and Clackamas counties.

The Coalition continues its mission of collaborating across the Portland metropolitan region to improve watershed health by changing household behaviors, reducing polluted runoff and connecting people with their local waterways.

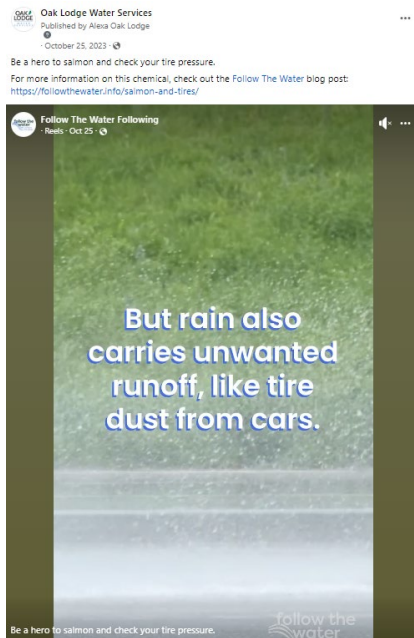
The Coalition’s key messages focus on raising awareness about pollution from stormwater runoff and motivating actions to protect surface water quality through action at the household level. The key messages are:

- Stormwater runoff goes directly to our local waterways without treatment. When it rains, pollutants from your home, car, and garden wash into our rivers and streams. Never dump anything into storm drains.
- Bacteria from uncollected dog waste washes into our rivers and streams. You can protect our water by picking up after your pets. OLWS partners with NCPRD to provide waste bags for dogs in our service area.
- Yard and garden products wash into our rivers and streams. You can protect our water by eliminating these products or using compost and slow-release fertilizer.
- Motor oil, solvents, and soaps wash into our rivers and streams. You can protect our water by keeping car-care chemicals out of storm drains, diverting wash water onto your landscaping, and going to a car wash.

### **In-person Events**

OLWS was a sponsor for the 2024 Oak Grove Festival, where we talked with customers about a variety of topics, including stormwater and not dumping into storm drains. We directly connected with two customers after the event who had further questions about storm drain management.

Below are examples of OLWS social media posts to discourage the use of lawn chemicals and connect the community to their waterways.



Please see the BMPs for Public Education listed in Appendix A for full detail on OLWS’s progress toward public education and outreach efforts.

## 5. Adaptive Management Process (A.2.f)

Over time, OLWS continues to evaluate the overall health of local watersheds using the information collected through the monitoring program. Monitoring data and information provides a valuable ‘snapshot’ of water quality in OLWS and provides program management the opportunity to determine where to focus limited financial resources for program implementation. OLWS continues targeting water quality issues that are trending toward exceeding state water quality standards; adjustments can be made to focus the messaging to the community about different water quality problems being observed. The anticipated outcome would be a reversal of negatively trending water quality factors because of actions taken by OLWS. Examples of actions might include stepped up inspection and enforcement in areas with documented water quality issues, targeted public outreach to smaller neighborhood or watershed groups that are the source of the problem, and targeted monitoring activities to try to minimize the area where the source of the water quality problems are coming from.

In 2023-2024, OLWS reviewed and updated its Illicit Discharge Detection and Elimination (IDDE) Standard Operating Procedure (SOP), including the inspection and tracking procedures, enforcement response guide, and Dry Weather Field Screening. The final IDDE SOP is available online in the OLWS MS4 Permit document library. Second, OLWS completed an audit of its Code language and procedures concerning erosion control inspection, reporting, and enforcement processes and found no changes were needed. Current erosion control practices were found to be in compliance and are available upon request. Finally, OLWS updated our Industrial / Commercial SOP with a focus on screening and reporting. This document was shared with the public for a 30-day period and the final Industrial / Commercial SOP is available in the online OLWS MS4 Permit document library.

## **6. Proposed Changes to SWMP (A.2.f)**

OLWS amended the SWMP during the 2023-2024 permit year as a result of the updated permit conditions required by DEQ. OLWS updated the 2023 SWMP during FY2024 to document the references to updated IDDE SOP, Erosion Control Practices and Procedures, and Industrial / Commercial SOP. In the 2023-23 reporting year, changes to the OLWS Design and Construction Standards will trigger proposed changes to the tracking measures for construction and post-construction reporting. The revised SWMP is posted on the MS4 Permit Library on the Watershed Protection Pages of the OLWS website.

## **7. Summary of SWM Program Expenditures (B.3.g)**

All revenue generated by the Watershed Protection Fee is retained within the surface water management program. During the 2024 Fiscal Year, one Equivalent Service Unit (ESU) was \$10.62 per month for residential households. For commercial and industrial users their ESU equivalent is calculated by dividing their total impervious surface by the residential ESU, or by 2,500 SF.

For the 2024 Fiscal Year, OLWS's expenditures for the surface water program totaled \$1,655,567, with \$1,655,567 being devoted to operational expenditures and \$0 being spent from the Surface Water Management Capital Improvement fund. In between capital investment projects, OLWS saves surface water fees to build up resources for investing in upcoming capital surface water projects.

## **8. Approved Modifications to Monitoring Plan (B.5.c)**

OLWS monitors stormwater and receiving waters of the state using the currently approved monitoring plan. Clackamas co-permittees including OLWS participate in the Clackamas County Coordinated Stormwater Monitoring Program (CCCSMP). The CCCSMP Plan was updated and resubmitted to DEQ on May 30, 2023, following the completion and outcome of the Clackamas NPDES MS4 Permit Modification (initiated in August 2022). The CCCSMP reflects updated pesticide monitoring frequencies and was approved by DEQ on June 7, 2023, for implementation beginning in July 2023.

## **9. Summary of SWM Program Water Quality Monitoring (B.5.d-e)**

Surface water sampling occurred four times annually as is required in the NPDES permit. The sites sampled included instream samples from each site, and two outfalls. In reviewing the water quality data, water quality elements for sediment and bacteria tend to be elevated, with periodic exceedances of the state standard for e. Coli. Other testing elements appear to be within DEQ range, and for this reporting year program monitoring occurred per the procedures outlined in the approved monitoring plan.

Required Mercury monitoring for the Clackamas MS4 Permit is being handled by Clackamas Water Environment Services (WES) and the first full year of sampling results will be submitted by the WES team as approved by the Oregon Department of Environmental Quality.

Required Pesticide monitoring is included in this year's water quality monitoring data.

Sample results are provided in Appendix B.

## **10. SWMP Inspection and Enforcement (A.3.c)**

OLWS routinely inspects the various elements of the Surface Water system within OLWS. A summary of the inspections, enforcements, and ongoing activities related to illicit discharges can be found in Appendix A.

## **11. Development Activities (A.3.e)**

Land within the Oak Lodge Water Services is largely built out, with very little undeveloped land available for new development and redevelopment activities are more common. Appendix A summarizes the number and type of development activities that OLWS reviewed. Currently, there are no proposals for land annexations, and OLWS does not implement any part of the Urban Growth Boundary.

## **12. OLWS Boundary Expansion and Authority (B.5.j)**

When Oak Lodge Sanitary District consolidated with Oak Lodge Water District to form Oak Lodge Water Services, its boundary grew by approximately 25%; this newly acquired area was already within Clackamas County Service District #1 (CCSD#1). To clarify whose authority would preside in this area, Oak Lodge Water Services District worked with CCSD#1 to create a Memorandum of Understanding (MOU) that allowed CCSD#1 to continue its service in this area since this area naturally drained to watersheds CCSD#1 was already managing. This MOU was later adopted via OLWS Resolution 2017-5. In addition, in 2023 Oak Lodge Water Services became an Authority. This protects the jurisdiction's assets, services and boundaries in perpetuity.

## **13. Public Notice of 2023-2024 Annual Report**

OLWS solicited public comment on this annual report in the following manner:

- Public Notice and Solicitation of Comments on the OLWS website: 2<sup>nd</sup> week, October 2024;
- North Clackamas Watersheds Council: OLWS's monthly report mentions availability of the report on the website for public review and comment: 3<sup>rd</sup> week, November 2024;
- The final 2023-2024 Annual Report was posted on OLWS website after submission to DEQ;
- Notice of the Annual Report Posting was sent to OLWS's *Interested Parties* list.

14. **Appendix A** - BMP Table on the following pages.
15. **Appendix B** - Water Quality Monitoring Data Sampling Summary. Data submission to DEQ occurred using the required online format.
16. **Appendix C** - Updated Post-Construction Standards for Stormwater Design and Construction: in fulfillment of requirements for MS4 Schedule A.3.e **2024-10-10 OLWS DesignAndConstructionStandards.pdf** ([oaklodgewaterservices.org](http://oaklodgewaterservices.org)).

Appendix A: BMP Table – OLWS 2023-2024 Summary of BMP Implementation

<i>Best Management Practice Name</i>	<i>MS4 Permit Schedule A Requirement</i>	<i>BMP Description</i>	<i>Tracking Measure</i>	<i>Annual Report 2023-2024</i>
<p><b>Illicit Discharge Detection and Elimination</b></p> <p><b>Implement the Illicit Discharges Elimination Program</b></p>	A.3.c	<p><b>BMP Description:</b> OLWS has the authority to conduct appropriate response procedures and enforce against responsible parties per the OLWS’s <i>Rules and Regulations</i>, Section 11 and as described in the OLWS’s <i>Spill and Illicit Discharge Enforcement Response Plan (Enforcement Response Plan)</i>.</p> <p>The OLWS partners with Clackamas County for code enforcement procedures, as outlined in Section 11.5 of the <i>Rules and Regulations</i>, which outline the enforcement as applicable to the violation class. The violation classes (I, II, and III) are detailed in Section 11.4 of the <i>Rules and Regulations</i>.</p> <p>The <i>Spill and Illicit Discharge Enforcement Response Plan</i>, including procedures and timeframes, are also documented in Appendix C of the OLWS’s <i>Illicit Discharge Detection and Elimination Standard Operating Procedure (SOP)</i>. In accordance with the SOP, all citizen complaints and staff observations regarding a possible illicit connection will be investigated. OLWS will continue to implement a public education and outreach program to explain illicit connections, effects on surface water, and process for correction.</p>	<p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) Status of updating the SOP and Enforcement Response Plan for consistency with current practice.</li> <li>2) Track the number, location, resolution, and enforcement activities related to any identified illicit discharge.</li> </ol>	<ol style="list-style-type: none"> <li>1. Illicit discharges are managed through OLWS’s documented Illicit Discharge Program. OLWS maintains an SOP (Standard Operation Procedure) for staff to perform enforcement actions with illicit discharges. The current SOP was updated and submitted to DEQ December 1, 2023 with the 2022-23 Annual Report.</li> <li>2. Illicit Discharge identification is outlined under dry weather field screening activities and spill response activities below.</li> </ol>
<p><b>Illicit Discharge Detection and Elimination</b></p> <p><b>Conduct Annual Dry Weather Field Screening</b></p>	A.3.c	<p><b>BMP Description:</b> OLWS conducts illicit discharge inspections, monitoring, and investigations annually during dry-weather conditions (typically between August and October) in accordance with the OLWS IDDE SOP. OLWS has identified five (5) high priority inspection locations within its service area. The IDDE SOP lists and maps those high priority inspection locations by drainage basin and contributing land use type. The OLWS maintains a map of dry weather field screening locations: GIS System and Asset Management Database for more information. OLWS does not currently have chronic illicit discharge locations, but locations may be added if identified.</p>	<p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) Track annual dry weather field screening activities at the high priority inspection locations.</li> <li>2) Summarize inspection results and indicate locations requiring sampling and/or investigations.</li> <li>3) Update dry weather screening prioritization criteria and adjusted locations, as applicable.</li> </ol>	<ol style="list-style-type: none"> <li>1. All five Dry Weather Outfalls were inspected during the dry season quarter of the 2023-2024 Permit year.</li> <li>2. No illicit discharges were noted from the outfall inspections.</li> <li>3. Updates to the IDDE SOP in 2023 included the following information: <ul style="list-style-type: none"> <li>• Locations were reviewed and adjusted as needed in conjunction with the S.O.P.</li> <li>• Field Screening and analysis procedures include photographs of CBs / outfalls each year;</li> <li>• Pollutant parameter action levels as described in screening;</li> <li>• Lab Analysis would occur through contracted lab relationship under the SWM monitoring program.</li> </ul> </li> </ol>

**Appendix A: BMP Table – OLWS 2023-2024 Summary of BMP Implementation**

<i>Best Management Practice Name</i>	<i>MS4 Permit Schedule A Requirement</i>	<i>BMP Description</i>	<i>Tracking Measure</i>	<i>Annual Report 2023-2024</i>
<p><b>Illicit Discharge Detection and Elimination</b></p> <p><b>Implement the Spill Response Program</b></p>	<p>A.3.c</p>	<p><b>BMP Description:</b> OLWS’s Spill Response Program prevents, contains, and responds to spills of dangerous, hazardous and other materials. OLWS’s Spill Response Program ensures that the actual or possible release of dangerous/hazardous materials to the MS4 is properly addressed. Except for minor incidents, OLWS’s Spill Response Program personnel always coordinate closely with other agencies and departments, including Clackamas County Fire District No. 1 (and for certain incidents involving hazardous materials, the Gresham HazMat Team), DEQ, Oregon State Police, the Clackamas County Department of Transportation and Development (CCDTD), and the Oregon Department of Transportation (ODOT).</p>	<ul style="list-style-type: none"> <li>• Implement the spill response program and associated protocols.</li> <li>• Coordinate with the Clackamas County Fire OLWS No. 1, Clackamas County DTD, and DEQ as necessary to respond to spills.</li> <li>• Equip select Operations vehicles with spill response equipment and the Spill and Illicit Discharge Response Form.</li> </ul> <p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) Number of reported spills to the MS4 system.</li> <li>2) Source and type of response to the reported spills.</li> <li>3) Report the number of spills and spill responses logged in Lucity</li> </ol>	<ol style="list-style-type: none"> <li>1. During the 2023-2024 reporting period OLWS received and investigated 3 storm water complaints of potential spills or illicit discharges.</li> <li>2. OLWS found that 3 of the reported complaints required an action response). IDDE complaint tracking numbers and response descriptions are saved in our content management system, Lucity. Records include description and follow-up response actions taken to each incident. Records available on request.: <ul style="list-style-type: none"> <li>• 2024-05-22: WM TRUCK REPORT</li> <li>• 2023-24-25: 17206 SE RIVER RD</li> <li>• 2023-24-24: 15008 SE KRONBERG AVE</li> </ul> </li> </ol> <p>Records include description and follow-up response actions taken to each incident. Records available on request.</p>
<p><b>Industrial and Commercial</b></p> <p><b>Screen Existing and New Industrial Facilities</b></p>	<p>A.3.g</p>	<p><b>BMP Description:</b> Industrial facility screening activities are outlined in the OLWS’ Industrial/Commercial Stormwater Inspection Program Standard Operating Procedure (SOP).</p> <p>Annually, in conjunction with BMP IND-2: Address High Pollutant Source Facilities, OLWS will review their existing database of commercial accounts within the district boundaries, to determine whether existing facilities may be subject to an industrial stormwater NPDES permit.</p> <p>If a facility is identified during the permit process or in conjunction with review of the commercial accounts database that would be subject to an industrial stormwater NPDES permit, the facility and DEQ will be notified within 30 days.</p> <p>OLWS maintains a GIS layer of all facilities subject to the 1200-Z permit and will update as new facilities are identified.</p>	<p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) Track the number of existing or new industrial facilities subject to a stormwater industrial NPDES permit during the permit term.</li> <li>2) Review new industrial development applications once during the permit term to identify additional facilities needing to obtain 1200-Z permits. If facilities are identified, notify DEQ in 30-days.</li> </ol>	<ol style="list-style-type: none"> <li>1. OLWS currently has 2 1200Z permit holders within its boundaries. No new Industrial user accounts opened in 2023-2024.</li> <li>2. OLWS continually reviews all new industrial facilities and business licenses through its development review process and as implemented in the Commercial Industrial S.O.P.</li> </ol>

**Appendix A: BMP Table – OLWS 2023-2024 Summary of BMP Implementation**

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<p><b>Industrial and Commercial</b></p> <p><b>Address High Pollutant Source Facilities</b></p>	<p>A.3.g</p>	<p><b>BMP Description:</b> Industrial facility screening activities are outlined in the OLWS' Industrial/Commercial Stormwater Inspection Program Standard Operating Procedure (SOP).</p> <p>OLWS maintains a list of industrial and commercial facilities with the potential to discharge a substantial pollutant load to the MS4. Identification of a high priority facility is based on citizen complaints, results of past inspections, the <i>Industrial Users Survey</i>, and other sources. The list is updated annually and maintained by the OLWS' Pollution Prevention Specialist.</p> <p>Annually at a minimum, inspections (windshield or onsite) will be conducted. Inspections of identified high priority facilities will occur only for facilities with discharges to the municipal storm sewer system. Facilities with a discharge through a private system directly to a surface water body will be the responsibility of Oregon DEQ. Inspection forms will be filled out, documenting the results of each inspection. As needed, technical support will be provided to property owners to improve water quality.</p>	<ul style="list-style-type: none"> <li>• Maintain the inventory of high pollutant source facilities continuously over the permit term.</li> <li>• Inspect identified facilities as needed using visual or analytical methods. When inspections indicate excess levels of pollutants of concern, notify and work with industries to increase pollution controls, and provide technical assistance to property owners.</li> <li>• Updates to the Industrial/Commercial Facility SOP were completed with facility prioritization, inspection and documentation procedures, and compliance with other ordinances by December 1, 2023.</li> </ul> <p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) Track updates to the inventory of high pollutant source facilities.</li> <li>2) Track the number of inspections performed annually and any enforcement or technical assistance provided.</li> </ol>	<ol style="list-style-type: none"> <li>1. Four commercial or industrial sites were identified as potential contributors of a substantial load of pollutants to the MS4 during 2023-2024. These facilities are consistent with those identified last year. <ul style="list-style-type: none"> <li>• 16600 SE Kens Ct. (Blue Sky Filters)</li> <li>• 3901 SE Naef Rd. (NW Flex Space)</li> <li>• 3810 SE Naef Rd. (Stanley Tools)</li> <li>• 3701 SE Naef Rd. (Buffalo Welding)</li> </ul> </li> <li>2. No enforcement actions or IDDE reports were made related to these properties. Windshield surveys, pretreatment monitoring, and routine monitoring reflected no excessive levels of pollutants.</li> </ol> <p>Of the above list of OLWS commercial and industrial accounts, that are tracked, only Blue Sky Filters performs is currently required to perform routine stormwater monitoring on site. There were no excessive levels of concern found in the monitoring results. Annual review and inspection of Pretreatment monitoring or routine monitoring reflected no excessive levels of pollutants from the other sites revealed no triggers of concern.</p>
<p><b>Construction Site Runoff Control</b></p> <p><b>Erosion Control Ordinances</b></p>	<p>A.3.d</p>	<p><b>BMP Description:</b></p> <p>OLWS administers erosion prevention and sediment control requirements in accordance the OLWS' <i>Rules and Regulations</i>, Section 10.15 and the OLWS's <i>Design and Construction Standards</i>, Section 2.1004. These sections detail the policies, procedures, and enforcement mechanisms related to the OLWS' issuance of Erosion Control/Surface Water Management Permits. Construction activities that affect 500 SF or more or 250 SF or more within the undisturbed buffer, sensitive areas, or riparian areas must obtain an Erosion Control/Surface Water Management Permit.</p> <p>The combined documents address regulatory and review requirements related to erosion control, tree removal, undisturbed buffers, and flow control and treatment requirements. These regulations require submittal of an erosion prevention and</p>	<p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) Report any updates or modifications to the OLWS's <i>Rules and Regulations</i> and the OLWS's <i>Design and Construction Standards</i> for consistency with permit requirements and current practices.</li> <li>2) Record the number of OLWS Erosion Control/Surface Water Management Permits issued annually.</li> <li>3) Develop an option for simplified ESCP and/or prescriptive BMPs for small or low-risk construction sites to aid in erosion control plan</li> </ol>	<ol style="list-style-type: none"> <li>1. OLWS adopted revised Design and Construction standards on October 10, 2024, by Board approval. This document contains OLWS's updated EC regulations which meet the current permit requirements.</li> <li>2. Number of erosion control permits issued: 31</li> <li>3. Available on the OLWS website, OLWS developed a simplified ESCP narrative checklist with prescriptive BMPs for small or low-risk construction sites to aid in ESC planning.</li> <li>4. The OLWS website contains the updates that have been made to the current drainage/ESC plan</li> </ol>



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		<p>sediment control plan containing methods and/or interim facilities to be constructed or used concurrently with land development.</p> <p>During the plan review process, new and redevelopment will be assessed for compliance with the OLWS' erosion control standards and provisions outlined in the Code and Clackamas County Erosion Prevention and Sediment Control Planning and Design Manual using an internal review checklist. The OLWS' written approval of erosion control plans and specifications is required prior to erosion control facility construction and installation. DEQ's 1200-C permit requirements also are in effect and OLWS tracks 1200-C permits issued and implement inspections and enforcement consistent with the local permit.</p>	<p>development by December 1, 2024, in conjunction with updates to OLWS Design and Construction Standards.</p> <p>4) Update the current drainage/ESC plan internal review checklist by June 1, 2023 to detail plan review activities in accordance with 1200-CN permit requirements and receipt of a 1200-C permit, if applicable.</p>	<p>internal review checklist to detail plan review activities in accordance with 1200-CN permit requirements and receipt of a 1200-C permit.</p>
<p><b>Public Education and Outreach</b></p> <p><b>Public Education to Reduce Discharges of Pollutants in Stormwater</b></p>	<p><b>A.3.b</b></p>	<p>OLWS continues to implement the OLWS' Outreach, Education, and Public Involvement Framework to document their public education strategy aimed at reducing the discharge of pollutants associated with a variety of materials, events, outreach activities, and education programs, including but not limited to:</p> <ul style="list-style-type: none"> <li>• The application of pesticides, herbicides and fertilizers by citizens.</li> <li>• Illicit discharges and public reporting to notify OLWS of unallowable waste materials in the storm drainage system. The OLWS website allows citizens to report incidents directly via a 24-hour emergency hotline or email.</li> <li>• Available OLWS programs for residents to improve water quality.</li> <li>• Proper disposal of waste oil and household hazardous waste.</li> </ul>	<p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) Track the number, types and topics of outreach events, programs, social media and materials.</li> <li>2) Continue to maintain relevant public education materials dispensed to the public annually.</li> </ol>	<p>The following outreach efforts occurred last year:</p> <p>Customer outreach: Six newsletters to all customers were distributed that included surface water education topics, including water quality and watershed health.</p> <p>Student Outreach:</p> <ul style="list-style-type: none"> <li>• The Aves Compartidas program provides Spanish immersion and dual language classroom lessons on ecology, restoration and land use, and offers field experiences where students engage in habitat enhancement projects. Programming supports the teachers and students at three dual language elementary schools: Candy Lane Elementary (4 classrooms), Riverside Elementary (3 classrooms), and Milwaukie El Puente Elementary (9 classrooms). This year, ECO delivered the Aves program at Candy Lane Elementary and Riverside Elementary schools. In total, the Aves program reached approximately 130 students across 5 different classrooms. ECO delivered 20 indoor lessons, 10 outdoor lessons, and 5 walking field trips, totaling 1,080 contact hours of engagement. At Riverside, the program integrated into dual language classrooms for 3rd-5th grades, focusing on migratory birds like the rufous hummingbird, yellow warbler, and great blue heron, which are</li> </ul>

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				<p>indicator species for water quality. Candy Lane's fourth graders focused on the yellow warbler and presented their projects at the year's end.</p> <ul style="list-style-type: none"> <li>• This Winter the Environmental Learning Center (ELC) at Clackamas Community College presented Livestream episodes to K-5 students. Each of ten episodes focused on wetland ecology, wildlife, and watershed health. Student activity sheets were developed to engage students in the content; each program has an accompanying sheet. Programs aligned with NGSS. Teachers were provided recordings of the sessions in addition to links for joining the live events. This enabled them view at a time that was convenient for them. Two episodes were delivered each week, one for grades K-3 (Wetland Wildlife) and the other for grades 4-5 (Wildlife in the Watershed). 52 students were reached each episode, for a total of 520-episode impressions. The ELC also offered three field trips that allowed 1<sup>st</sup>-5<sup>th</sup> grade students to discover and explore wetland and forest ecosystems. In total, 268 North Clackamas School District and 32 Oregon City School District students were reached via field trips.</li> <li>• This year's ECO general programming engaged approximately 400 students across Oak Grove Elementary, View Acres Elementary, Candy Lane Elementary, Riverside Elementary, New Urban High, and Rex Putnam High, totaling 2,100 contact hours. ECO educators delivered 44 indoor lessons, 20 outdoor lessons, and 25 walking field trips. At Oak Grove Elementary, View Acres Elementary, New Urban High, and Rex Putnam High, ECO reached about 270 students. These students learned a broad range of ecology topics and participated in activities like planting native plants and visiting local parks. Feedback from students showed that 79% believed kids can change the environment's health, and 94% liked nature. One student said, "I like ECO because it is important to teach kids about</li> </ul>

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				<p>our planet,” while a teacher appreciated the program’s hands-on activities and multiple lesson structures.</p> <p>Adult outreach:</p> <ul style="list-style-type: none"> <li>• OLWS partners with the Backyard Habitat Certification Program (BHCP) to support urban gardeners in their efforts to create natural backyard habitats. This includes working with homeowners to find stormwater solutions in their yards to mimic nature by allowing runoff to soak into the ground, helping to filter out pollutants and decrease or eliminate runoff on their property. This year, in the OLWS Service Area, BHCP visited 28 properties and 5 were certified.</li> <li>• OLWS partners with the North Clackamas Watersheds Council to offer the <a href="#">Streamside Stewards Program</a> (SSP), which works to enhance and maintain watershed health by supporting landowners along OLWS streams. Along with annual maintenance in priority habitat areas, the SSP hosts <a href="#">seasonal workshops</a> on topical streamside restoration activities, and online watershed education classes focusing on wildlife, stream health, and community engagement opportunities.</li> <li>• OLWS has partnered with EcoBiz since 2020 to provide targeted outreach and education to automotive businesses with the goal of reducing the potential loading of pollutants into the storm/sewer systems. Over the course of the fiscal year, EcoBiz reached out to 49 businesses in the Oak Lodge community. EcoBiz also performed targeted outreach to auto dealerships along McLoughlin Boulevard to enlist them in piloting the Washwater BMP video. 19 businesses were reached via email, phone calls, and in person. 5 businesses agreed to have their staff watch the</li> </ul>

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				<p>video, take a corresponding quiz, and report back to us with any suggestions.</p> <p>Events: OLWS participated in several events that contained water quality education for students and adults. These included the following:</p> <ul style="list-style-type: none"> <li>• This year’s in person Clean Water Festival welcomed 755 4<sup>th</sup>-grade students from 16 schools. The event included classroom presentations, exhibitions from 31 organizations, and a stage show. Oak Lodge was an exhibitor and had a live stormwater demonstration.</li> <li>• The North Clackamas Watersheds Council (NCWC) partnership continues to provide public outreach benefits to people living in our service area. OLWS partnered with NCWC to once again hold in-person workshops about the importance of human actions and their impact on watershed health.</li> <li>• OLWS partnered with the Clackamas Community College’s Environmental Learning Center to offer a six-part online gardening workshop series. The goal was to provide homeowners with information on how to adapt their gardening practices to benefit and attract wildlife while promoting watershed health. In total, 764 people attended one or more programs.</li> <li>• Outreach groups: Participated in local outreach groups and public involvement campaigns, including: the Clean Rivers Coalition’s <i>Follow the Water</i> statewide campaign, Clackamas County Water Education Team (CCWET), and the Regional Coalition for Clean Rivers and Streams <i>River Starts Here</i> regional campaign. We have final reports for each program available upon request.</li> <li>• The What’s Your Lawn Style project was also developed by the Clean Rivers Coalition. This project focused on delivering integrated pest</li> </ul>

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				<p>management techniques for lawn care to reduce nonpoint source runoff of pesticides and quick release fertilizers by single family residents. The education and materials from this campaign were sent to OLWS customers through our bi-monthly newsletter, website, and social media.</p> <p>Virtual outreach:</p> <ul style="list-style-type: none"> <li>Presented and contributed to creating virtual content and social media outreach relevant to water quality education information for OLWS customers, property owners, tenants, educators, and students. This included creation of paid media with KPTV (FOX 12). Messages highlighted car washing tips to help keep soap and other pollutants out of our streams, and stormwater smart yard and garden maintenance.</li> </ul>
<p align="center"><b>Public Education and Outreach</b></p> <p align="center"><b>Public Education to Reduce Discharges of Pollutants in Stormwater</b></p>	A.3.f	<p><b>BMP Description:</b> Privately owned SWM facilities require periodic inspection and maintenance to keep them working correctly. This effort focuses on outreach and education to those private landowners who own these types of facilities.</p>	<p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>Number and Type of Education and Outreach efforts provided to private landowners with stormwater management facilities.</li> <li>Track coordinated public outreach activities with local co-permittees.</li> <li>Record the number of catch basins stenciled each year.</li> </ol>	<ol style="list-style-type: none"> <li>155 Outreach letters were sent to owners engaging them in awareness, cleaning, maintenance, and functionality of their catchment systems. Provided supplemental information to owners when owners reached out requesting additional information.</li> <li>Participation in the Stormdrain Cleaning Assistance Program (SCAP) with postcards sent to 254 commercial owners with private storm drains on their property/business. OLWS utilized a QR code and text to sign up as well as an online electronic signup option through the OLWS website to make the process easier for business owners.</li> <li>There were 43 catch basins stenciled in partnership with Rose Villa Senior Living.</li> </ol>
<p align="center"><b>Public Education and Outreach</b></p>	A.3.a	<p><b>BMP Description:</b> Provide notice to construction site operators concerning where education and training to meet erosion prevention and sediment control requirements can be obtained.</p>	<p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>Track methods and tools to notify construction site operators of erosion control requirements and training opportunities.</li> </ol>	<ol style="list-style-type: none"> <li>Oak Lodge has four CESCL certified erosion control staff members and provides construction site operators with notice and training opportunities on an ad hoc basis during initial inspections at the start of new erosion control permits.</li> </ol>

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Erosion Control Training Opportunities			2) Maintain a link to the Clackamas County Erosion Prevention and Sediment Control Planning and Design Manual on the OLWS’s website. 3) Develop a check list (or equivalent) guidance for developers and engineers requesting building permits, site development permits, or construction inspection services to aid in erosion control plan development by December 1, 2024, in conjunction with updates to OLWS Design and Construction Standards.	2. A link to the Clackamas County Erosion Prevention and Sediment Control Planning and Design Manual is maintained on the OLWS website’s Permits page. 3. Currently, OLWS Development Services Staff is in the process of updating guidance for permit applicants to aid in erosion control plan development.
Public Education and Outreach  Employee Training	A.3.a	<b>BMP Description:</b> A variety of training is provided to staff associated with surface water management. Training and advisory committee opportunities are made available through local agencies and groups involved with a broad range of water quality issues including stormwater (e.g., Oregon Association of Clean Water Agencies conferences). Such training is provided based on need and availability.	Measurable Goals: 1) Track the number of employees receiving training by activity annually. 2) Estimate the equivalent annual training hours provided internally and externally.	Specific Staff Trainings included: 1. OLWS Water Quality Coordinator attended Oregon ACWA’s Annual Stormwater Summit (8 hours). 2. OLWS conducted an all-staff training for new and seasoned relevant staff and provided a comprehensive electronic training course on the MS4 Stormwater Permit with a focus on sediment control and good housekeeping practices (13 staff for 1 hour each).
Public Education and Outreach  Facilitate Public Reporting of Illicit Discharges	A.3.c	<b>BMP Description:</b> OLWS implements a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges and other types of improper disposal of materials into the MS4. After District staff have received a report which relates to one of these discharges, they investigate and, if appropriate, apply control measures.	Measurable Goals: 1) Number illicit discharges reported. 2) Number of illicit discharges requiring action. 3) Number of educational events educating public about illicit discharges and procedures to report. 4) Number of publications educating public about illicit discharges and procedures to report. 5) Create a page for public complaints on the OLWS’ website and track number of complaints for reporting.	1. Potential illicit discharges reported: 3 2. Actions taken: 3 (see IDDE above for details). 3. Educational Events: 2 – IDDE outreach/education during public meetings with customers. 4. Educational Publications: <ul style="list-style-type: none"> <li>• Dump Smart Campaign – Painting, Carpet Cleaning and Pressure Washing (Posted on OLWS website)</li> <li>• Where to Properly Dispose of unwanted or expired medications (Posted on website)</li> <li>• EPA/NOAA – Keep Salmon off Drugs (Poster)</li> <li>• Clackamas River Water Providers – Keep Pesticides and Herbicides Out of the River (Pictorial Poster)</li> </ul>

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				<ul style="list-style-type: none"> <li>Regional Coalition for Clean Rivers and Streams – River Starts Here Campaign (Web and paid media outreach)</li> <li>Clean Rivers Coalition – statewide social media campaign to raise awareness about pesticide reduction</li> <li>5. Public submits complaints through the information email on the OLWS website or calls staff directly. Complaints are coded in Lucity, the OLWS’ Computerized Maintenance Management System.</li> </ul>
<p align="center"><b>Public Involvement and Participation</b></p> <p align="center"><b>Healthy Watershed Committee</b></p>	A.3.b	<p><b>BMP Description:</b> Schedule A.4.e of the District’s MS4 NPDES permit requires OLWS to provide opportunity for public participation in the development, implementation, and modification of the Storm Water Management Plan (SWMP). Prior to submittal of various milestone reports, OLWS will provide the public with an opportunity to comment for a period of 2 weeks prior to submittal dates. Comments on the documents will be collected and considered.</p> <p>Additionally, OLWS has many opportunities for members of the community to participate in various sub committees that provide oversight and guidance to OLWS management related to MS4 implementation. Opportunities include intermittent participation in the Healthy Watersheds Committee, to which local community members are invited to participate in review of OLWS stormwater capital projects.</p>	<p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) Keep a count of the number of comments/questions received from the public on documents distributed for 30-d review.</li> <li>2) Conduct an annual review of the website and document revised content and links as needed.</li> <li>3) Report on Healthy Watersheds Committee activities annually.</li> </ol>	<ol style="list-style-type: none"> <li>1. SWM 2023-2024 Annual Report Public Notice: posted to the website on November 1, 2024, shared with OLWS Board Members on November 12, 2024, and at the North Clackamas Watersheds Council board meeting on November 20, 2024. No comments were received. In addition, the website contains MS4 Permit and supporting material, with ongoing opportunities for public to comment.</li> <li>2. The OLWS website was reviewed and updated as needed to reflect current permit documents.</li> <li>3. The Healthy Watersheds Committee did not meet in FY24 because of limited need and staffing changes.</li> </ol>
<p align="center"><b>Construction and Post-Construction Site Runoff Control</b></p> <p align="center"><b>Erosion Control Inspections</b></p>	A.3.d	<p><b>BMP Description:</b> OLWS conducts a minimum of three (3) inspections during construction activities at all sites requiring an OLWS Erosion Control/Surface Water Management Permit. Inspections are conducted to ensure proper implementation of erosion control measures.</p> <p>An initial site inspection is conducted to assess the location of erosion control facility installations and the potential for offsite discharge of soil and debris. A final inspection is performed, and the Permit closed when the excavation and grading is finished at the site and the soil has been stabilized to a point where erosion potential is negligible. A minimum of one (1), interim inspection is conducted during a period of high construction activity, ideally after a storm event, or a</p>	<p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) Record the number of erosion control inspections conducted annually in accordance with Accela.</li> <li>2) Report the number of construction sites where enforcement provisions per OLWS’s Rules and Regulations were issued annually.</li> <li>3) Document status of updated ESC enforcement procedures and developed guidelines or checklists, as required.</li> </ol> <ul style="list-style-type: none"> <li>• Track annual number of approved ESC plan, inspections, and complaints. Summarized metrics to be provided to DEQ upon request.</li> </ul>	<ol style="list-style-type: none"> <li>1. Number of erosion control inspections completed: 247</li> <li>2. Number of enforcements (violations that needed enforcement action): 0</li> <li>3. There were no updates to the approved ESC enforcement SOP.</li> </ol>

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<i>Best Management Practice Name</i>	<i>MS4 Permit Schedule A Requirement</i>	<i>BMP Description</i>	<i>Tracking Measure</i>	<i>Annual Report 2023-2024</i>
		<p>maximum of three weeks from the previous inspection to ensure erosion control measures and facilities are being appropriately used and maintained.</p> <p>OLWS staff fills out an initial inspection form through Accela during the initial site inspection and populates an electronic erosion control log with information including project contact information, project size, dates of approved erosion control plan, inspections, complaints, and deficiencies as identified during additional erosion control inspections. Accela is accessible by DEQ and is a database that maintains all inspection records, including OLWS inspections of 1200-C sites.</p>	<ul style="list-style-type: none"> <li>• Inspect all sites requiring an Erosion Control/Surface Water Management Permit a minimum of three (3) times during construction activities.</li> <li>• Issue Notice of Non-Compliance and/or stop work orders and, as applicable, notify DEQ when ineffective erosion control is observed on 1200-C sites.</li> <li>• Develop additional tools to aid in effective implementation of an erosion and sediment control program (i.e., updated construction site inspection checklist, updated Accela forms) by December 1, 2024, in conjunction with updates to OLWS Design and Construction Standards and report/ post updates as required.</li> </ul>	
<p><b>Pollution Prevention for Municipal Operations</b></p> <p><b>Street Sweeping and maintenance for Public Streets</b></p>	A.3.f	<p><b>BMP Description:</b> Street sweeping is conducted approximately twice per year by Clackamas County, in accordance with conditions and processes identified in the MOU. The County increases this frequency during heavy leaf shedding season, after major construction, after winter deicing activities, and at other times when circumstances dictate the need to minimize the discharge of stormwater pollutants to the MS4.</p> <p>Road maintenance and repair work including roadside ditch maintenance is performed by the County and generally scheduled and conducted during the dry season, when possible, to minimize polluted discharges from entering the stormwater conveyance system. Roadside ditch inspections are conducted in conjunction with sweeping activities and per conditions and processes in the MOU. Any required grading activities will meet requirements as stated in the erosion control regulations.</p> <p>Through the MOU, Clackamas County is responsible for documentation of sweeping and ditch maintenance activities to fulfill the OLWS’s annual reporting obligations.</p>	<p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) Number of miles that were swept within OLWS per year</li> <li>2) Mass or volume of debris removed during sweeping</li> <li>3) Length of ditches maintained annually</li> <li>4) Record updates to the MOU</li> </ol> <ul style="list-style-type: none"> <li>• For CCDTD roads, see tracking measures in the CCDTD NPDES MS4 SWMP. Maintain existing MOU with Clackamas County DTD to conduct sweeping and maintenance activities.</li> <li>• Meet with Clackamas County to review/refine conditions of the MOU related to street sweeping and zone designations by December 1, 2024.</li> <li>• Schedule and conduct routine road repair and maintenance as needed, during the dry-weather conditions if possible.</li> </ul>	<ol style="list-style-type: none"> <li>1. Street Sweeping within OLWS Boundary (MOU with CCDTD): 545 Curb/ Shoulder Miles. OLWS also contracts with the City of Milwaukie to have its impervious surfaces for facilities swept once a month.</li> <li>2. N/A Cubic Yards debris removed – CCDTD no longer tracks CY debris removed; OLWS SWMP in process of being updated to reflect this change.</li> <li>3. Ditch Cleaning by CCDTD: 500 ft</li> <li>4. No updates to the MOU have been initiated this reporting year.</li> </ol>
<p><b>Pollution Prevention for Municipal Operations</b></p>	A.3.f	<p><b>BMP Description:</b> Operations and maintenance of public streets within the DTD service area (which includes OLWS) is the responsibility of CCDTD. This includes Winter maintenance activities for roadway operations, litter control, and materials disposal. For information on their activities, refer to the CCDTD MS4 NPDES SWMP.</p>	<p>Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) CCDTD Roads: See CCDTD’s NPDES MS4 SWMP.</li> <li>2) Remove illegal solid waste dumps as they are discovered.</li> </ol>	<p>1-5. Refer to CCDTD’s MS4 Annual Report for reference to Winter maintenance events, quantities and locations of material used.</p>



**Appendix A: BMP Table – OLWS 2023-2024 Summary of BMP Implementation**

<i>Best Management Practice Name</i>	<i>MS4 Permit Schedule A Requirement</i>	<i>BMP Description</i>	<i>Tracking Measure</i>	<i>Annual Report 2023-2024</i>
Winter Weather Management			3) Track the number of winter weather events, quantities and locations of material used on County roads within OLWS. 4) Implement the CCDDT winter maintenance strategy as documented. 5) Update the MOU to incorporate winter maintenance activities and tracking needs within the district.	
Post-Construction Site Runoff Controls	A.3.e	<p><b>BMP Description:</b> OLWS reviews new and redevelopment for compliance with OLWS’s <i>Rules and Regulations</i>, Section 10.20 and the OLWS’s <i>Design and Construction Standards (D&amp;C)</i>, Section 2. Code and standards detail the policies and requirements related to conveyance, stormwater quantity control, infiltration, and water quality control. Development activities that affect 1,000 SF or more of new and redeveloped impervious surface must implement post-construction stormwater management. Recorded operations and maintenance agreements are required for onsite facilities and are submitted before permit issuance.</p> <p>Acceptable water quality facilities are listed in Code and promote low impact development and green infrastructure, including vegetative infiltration facilities.</p> <p>OLWS uses Accela and an internal review checklist for design submittals in accordance with requirements outlined in the D&amp;C to review development applications. The required submittal includes completed inspection form, narrative, stormwater drainage report, infiltration/ geotechnical testing, and facility design calculations and details. Plan reviewers use the checklist to document the technical feasibility and site constraints related to onsite management of stormwater runoff as well as downstream analysis needs/ requirements and respective treatment and flow control facility sizing.</p> <p>OLWS will conduct a review of their <i>D&amp;C</i> to document OLWS’ existing strategy to prioritize LID and GI strategies for stormwater management as well as adherence to the NSSR or alternative compliance standard. Modifications to the <i>D&amp;C</i> will be made to improve upon OLWS’ existing strategy and comply with requirements of the NPDES MS4 permit.</p> <p>Post-construction stormwater management specific training is outlined in Staff Training Table.</p>	<p>Measurable Goals:</p> 1) Track the number of development applications reviewed and approved for compliance with the stormwater regulations. 2) Track the number, type, and drainage area of stormwater facilities installed to address post-construction requirements. 3) Track updates to the D&C in accordance with the regulatory compliance dates and upload documentation in the MS4 Reference Library.	<p>Oak Lodge Water Services’ Design and Construction Standards were recently updated to fulfill the current permit’s post construction requirements for stormwater standards. These standards were approved and adopted in October 2024. As such, we are currently in the process of implementing new tracking measures.</p> <p>Oak Lodge Water Services will have these measures implemented by the end of the year and be able to reflect the following measures:</p> <ol style="list-style-type: none"> <li>1. Track the number of development applications reviewed and approved for compliance with the stormwater regulations. For this reporting year, there were 247 final inspections of permits requiring post-construction controls.</li> <li>2. Track the number, type, and drainage area of stormwater facilities installed to address post-construction requirements. Estimate of total new and replaced impervious surface area related to development projects: 9.42 acres. This measure will be able to be reported comprehensively in the next annual report.</li> <li>3. Oak Lodge Water Services’ Design and Construction Standards were recently updated to fulfill the current permit’s post construction requirements for stormwater standards. These standards were approved, adopted, and posted to the MS4 Reference Library in October 2024.</li> </ol>

**Appendix A: BMP Table – OLWS 2023-2024 Summary of BMP Implementation**

<i>Best Management Practice Name</i>	<i>MS4 Permit Schedule A Requirement</i>	<i>BMP Description</i>	<i>Tracking Measure</i>	<i>Annual Report 2023-2024</i>
<p align="center"><b>Pollution Prevention for Municipal Operations</b></p> <p align="center"><b>Public Involvement: Flood Management and Water Quality Projects in Partnership with Local Partners</b></p>	<p align="center"><b>4.3.f</b></p>	<p><b>BMP Description:</b> OLWS’s current Watershed Protection Program Capital Improvement Plan (2020-2025) includes 4 CIPs worth approximately \$1.938 million. In 2015, the OLWS developed a water quality retrofit strategy, which refined CIP concepts and reprioritized projects based on potential water quality benefits. Also, in 2015, OLWS completed a hydromodification assessment, which assessed erosion and incision impacts along surface waters and evaluated strategies to address such impacts.</p> <p>By December 1, 2023, OLWS will review and assess implementation related to the OLWS’s Retrofit Strategy and Hydromodification Assessment. The report will identify progress toward, or completion of projects identified in the Retrofit Strategy priority list, with a qualitative assessment of the benefits of those projects, as well as describe any actions taken because of the Hydromodification Assessment. New goals, tools, priorities, and planned or potential projects for addressing ongoing hydromodification and/or water quality impacts will be identified.</p> <p>Over the next permit term, the OLWS will update the SMP to develop a revised CIP to address water quality and quantity needs.</p>	<p>Track the implementation status of Measurable Goals:</p> <ol style="list-style-type: none"> <li>1) Ensure all planned stormwater CIP projects or public infrastructure CIPs include consideration of water quality.</li> <li>2) Number of retrofits constructed that address water quality treatment.</li> <li>3) Number of flood management projects implemented each year and discuss the added benefit (water quality, habitat restoration, etc.) of each project.</li> <li>4) Track the status of updates to the SMP. <ul style="list-style-type: none"> <li>• Continue implementation of the SMP and retrofit strategy and hydromodification assessment related to capital projects to address water quality objectives.</li> <li>• In conjunction with public infrastructure projects, continue installing sumped catch basins and manholes to promote collection of sediment and debris.</li> <li>• Document findings and outcomes related to the creation of the OLWS’s Retrofit Strategy and Hydromodification Assessment by December 1, 2023 and maintain an inventory of completed retrofit projects and hydromodification strategies implemented during the permit term.</li> <li>• By December 1, 2026, prepare an updated SMP.</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Oak Lodge Water Services continues to fund North Clackamas Watersheds Council’s (NCWC) Streamside Stewards Program which enhances water quality and streamside health. OLWS refers to and supports restoration and enhancement projects from NCWC’s Watershed Action Plan, to improve water quality and floodplain function. Additionally, OLWS funds the Backyard Habitat Certification Program (BHCP) in partnership with the Columbia Land Trust and the Bird Alliance of Oregon. BHCP educates and informs the public on yard maintenance options that limit the use of herbicides and pesticides on private property which can get into our streams and reduce water quality.</li> <li>2. No retrofits constructed that address water quality treatment.</li> <li>3. Funding provided to NCWC to restore and enhance the confluence of the River Forest Creek at the Willamette River. This project went into design in this reporting year, with construction being conducted in the following reporting year. Fish habitat enhancements were installed in the last 100 yards up to the mouth of the creek.</li> <li>4. No updates to the SMP.</li> </ol>
<p align="center"><b>Pollution Prevention for Municipal Operations</b></p> <p align="center"><b>Public Stormwater System</b></p>	<p align="center"><b>4.3.g</b></p>	<p><b>BMP Description:</b> The OLWS maintains a memorandum of understanding (MOU) with Clackamas County, implemented through the Department of Transportation and Land Development (DTD) to conduct maintenance on the OLWS’s stormwater conveyance system, specifically pipes, catch basins, and pollution control manholes in accordance with frequencies and schedules outlined in the MOU.</p> <p>OLWS inspects approximately 20% of the public stormwater pipes, catchbasins, and pollution control manholes annually, consistent with the street sweeping schedule. OLWS inspects at least 20% of public water quality facilities annually in</p>	<ol style="list-style-type: none"> <li>1) Track the number of catch basins, pollution control manholes, and public water quality facilities inspected and maintained annually.</li> <li>2) Track the volume of debris removed during catch basin/ pollution control manhole maintenance. <ul style="list-style-type: none"> <li>• Maintain existing MOU with Clackamas County DTD to conduct inspection and maintenance of the stormwater collection system.</li> </ul> </li> </ol>	<p>During this reporting period, OLWS and CCDTD continued a coordinated approach to storm system inspection and maintenance cleaning (see updated SWMP Zone Map).</p> <ul style="list-style-type: none"> <li>• Catch basin Inspections: 429</li> <li>• Catch basins and Structures Cleaned: OLWS: 139</li> <li>• Structures Cleaned by CCDTD: 29</li> <li>• Structures Cleaned by SCAP contractor: 23</li> </ul>

**Appendix A: BMP Table – OLWS 2023-2024 Summary of BMP Implementation**

<i>Best Management Practice Name</i>	<i>MS4 Permit Schedule A Requirement</i>	<i>BMP Description</i>	<i>Tracking Measure</i>	<i>Annual Report 2023-2024</i>
<b>Cleaning and Maintenance</b>		<p>accordance with the OLWS Vegetated Stormwater Facility Inspection Standard Operating Procedure (SOP). Facilities are inspected for accumulated sediment and debris, indication of illegal dumping and disposal in the facility, and any broken or non-functioning structures in need of repair and/or replacement.</p> <p>Maintenance is conducted concurrent with system inspections and includes the removal of sediment, trash, and debris and replacement of vegetation, as necessary. Established maintenance thresholds are as follows: catchbasins and pollution control manhole sumps will be vactored when the sump has eight inches or more of dirt/sediment/trash accumulation; detention pipes will be vactored out when more than 20% of the volume is taken up with accumulated sediment; material disposal for public storm system cleaning is put into a wet decant facility, located on OLWS property.</p> <p>Per the MOU, OLWS responds to routine service needs and routes service requests to DTD if they require emergency response.</p>	<ul style="list-style-type: none"> <li>Inspect 20% of the public stormwater pipes, catch basins and pollution control manholes in accordance with the frequency established in the MOU.</li> <li>Inspect 30% of all public water quality facilities annually.</li> <li>Maintain public stormwater system components in accordance with established maintenance thresholds.</li> </ul> <p>3) Update the SOP for inspection of stormwater assets to incorporate inspection and maintenance enforcement for private facilities.</p>	<ul style="list-style-type: none"> <li>Mass of Debris Removed by OLWS: 94.76 Cubic Yards</li> <li>Mass of Debris Removed by CCDTD: 39.58 CY</li> <li>Mass of Debris Removed by SCAP: SCAP 5.58 CY.</li> <li>Culverts Cleaned by CCDTD: 14 culverts</li> </ul> <p>No updates to OLWS SOPs.</p>
<p><b>Pollution Prevention for Municipal Operations</b></p> <p><b>Private Water Quality Facility Maintenance</b></p>	A.3.f	<p><b>BMP Description:</b> OLWS currently maintains a private water quality facility inventory using GIS. The OLWS requires privately owned commercial and residential facilities to submit an approved maintenance plan for their water quality and quantity stormwater facilities. Private facility owners receive outreach information and are subject to periodic inspection to ensure proper maintenance and performance.</p> <p>OLWS distributes annual letters to property owners, reminding them of their maintenance obligations. OLWS will conduct annual onsite inspections at 20% of the private stormwater facilities and conduct enforcement in conjunction with OLWS’ Rules and Regulations, Section 11.</p>	<ol style="list-style-type: none"> <li>Track the number of letters distributed to private stormwater facility owners annually.</li> <li>Track the number of onsite private stormwater quality facility inspections conducted annually.</li> <li>Document updates, as applicable to the OLWS Vegetated Stormwater Facility Inspection S.O.P. for stormwater assets.</li> <li>Number of structures inspected and cleaned.</li> </ol> <ul style="list-style-type: none"> <li>Distribute maintenance reminder letters for private facility owners annually.</li> <li>Annually inspect 20% of private stormwater facilities to ensure maintenance has been conducted consistent with submitted maintenance plans.</li> <li>Continually review and update (if needed) the OLWS Rules and Regulations to provide sufficient legal authority to inspect and enforce private facility maintenance.</li> <li>Update the SOP for inspection of stormwater assets to incorporate inspection and maintenance enforcement for private facilities.</li> </ul>	<ol style="list-style-type: none"> <li>A letter was sent to owners of single-family private facilities with OLWS SWM Facility Agreements explaining the requirement to clean and maintain facilities.</li> <li>7 Ponds and 34 Private Facility assets inspections were completed in the 2023-2024 permit year. SWM Assets that required cleaning were completed.</li> <li>Updates were made to the OLWS Vegetated Stormwater Facility Inspection S.O.P. to prepare the way for the electronic reporting system that is in the process of being implemented.</li> <li>41 private stormwater quality structures were inspected, with 20% of them being cleaned or having signs of annual maintenance present.</li> </ol>

Appendix A: BMP Table – OLWS 2023-2024 Summary of BMP Implementation

<i>Best Management Practice Name</i>	<i>MS4 Permit Schedule A Requirement</i>	<i>BMP Description</i>	<i>Tracking Measure</i>	<i>Annual Report 2023-2024</i>
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SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Calcium, Total	7460-70-2	8.81	mg/L		NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-03	2023/12/25	21:36		
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Copper, Dissolved	7460-66-4	0.00667	mg/L		H-12	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-03	2023/12/25	21:36	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Copper, Total	7460-50-8	0.00667	mg/L		H-12	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-03	2023/12/25	21:36	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	pH Temperature (deg C), Total	7723-14-0	21.5	°C			NR	mg/L	5.00	mg/L	MPN/100 mL	NA	A30845-03	2023/12/25	18:45	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Hardness, Total	HA00	31.8	mg CaCO3/L		U-01	NR	mg CaCO3/L	2.12	mg CaCO3/L	SM 240B	Alex Laboratories	A30845-03	2023/12/25	21:36	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Lead, Dissolved	HEM	4.0	mg/L		H-12	NR	mg/L	0.00200	mg/L	EPA 1664B	Alex Laboratories	A30845-03	2023/12/25	21:36	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Lab Filtration (prep only)/REM/DVE	PREP	N/A	N/A	N/A	N/A	NR	N/A	N/A	N/A	NA	Alex Laboratories	A30845-03	2023/12/26	21:36	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Lead, Total	7489-92-1	0.00200	mg/L		H-12	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-03	2023/12/25	21:36	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Lead, Dissolved	7489-92-1	<0.00200	mg/L		H-12	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-03	2023/12/25	21:36	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Magnesium, Total	7489-95-4	2.61	mg/L			NR	mg/L	0.150	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-03	2023/12/25	21:36	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Nitrite-Nitrogen, Total	7723-37-9	0.00200	mg/L			NR	mg/L	0.00200	mg/L	SM 4000 F E	Alex Laboratories	A30845-03	2023/12/25	21:36	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Orthophosphate Phosphorus, Total	26488-19-9	0.0813	mg/L			NR	mg/L	0.0200	mg/L	SM 4000 F E	Alex Laboratories	A30845-03	2023/12/26	16:23	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	pH Temperature (deg C), Total	7723-14-0	21.5	°C			NR	mg/L	5.00	mg/L	MPN/100 mL	NA	A30845-03	2023/12/25	18:45	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Phosphorus, Total	7723-14-0	0.158	mg/L			NR	mg/L	0.100	mg/L	SM 4000 F E	Alex Laboratories	A30845-03	2023/12/23	17:40	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Total Suspended Solids, Total	TSS	29.0	mg/L			NR	mg/L	5.00	mg/L	SM 2540 C	Alex Laboratories	A30845-03	2023/12/21	17:40	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Zinc, Dissolved	7440-66-6	0.0273	mg/L		H-12	NR	mg/L	0.0400	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-03	2023/12/27	19:07	
SW 15 FARM04S	2023/12/05	10:25	PST	Water	Sample-Routine	SW 15 FARM04S 202312051025 Composite	Zinc, Total	7440-66-6	0.081	mg/L			NR	mg/L	0.0400	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-03	2023/12/25	21:36	
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Biochemical Oxygen Demand, Total	8005	<0.00200	mg/L		U	NR	mg/L	3.33	mg/L	SM 5210 B	Alex Laboratories	A30845-02	2024/02/05	12:19	
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Calcium, Total	7460-70-2	13.1	mg/L			NR	mg/L	0.400	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-02	2024/02/12	11:42	
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Copper, Total	7460-50-8	0.00398	mg/L			U	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-02	2024/02/12	13:45
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Copper, Dissolved	7460-50-8	<0.00200	mg/L			U	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-02	2024/02/12	13:45
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	E, Coli, Total	Ecol	613	MPN/100 mL		U	NR	MPN/100 mL	1.00	MPN/100 mL	SM 9213 B	Alex Laboratories	A30845-02	2024/02/29	17:02	
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Hardness, Total	HA00	56.8	mg CaCO3/L		U-01	NR	mg CaCO3/L	2.12	mg CaCO3/L	SM 240B	Alex Laboratories	A30845-02	2024/02/27	13:45	
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	HEM (DI and Gressel), Total	HEM	<1.38	mg/L		U-01	NR	mg/L	5.81	mg/L	EPA 1664B	Alex Laboratories	A30845-02	2024/03/06	11:40	
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Lab Filtration (prep only)/REM/DVE	PREP	N/A	N/A	N/A	N/A	NR	N/A	N/A	N/A	NA	Alex Laboratories	A30845-02	2024/02/29	18:45	
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Lab Filtration (prep only)/REM/DVE	PREP	N/A	N/A	N/A	N/A	NR	N/A	N/A	N/A	NA	Alex Laboratories	A30845-02	2024/02/29	18:45	
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Lead, Total	7489-92-1	0.0154	mg/L			U	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-02	2024/02/12	13:45
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Lead, Dissolved	7489-92-1	<0.00200	mg/L			U	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-02	2024/02/12	13:45
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Magnesium, Total	7489-95-4	4.42	mg/L			U	NR	mg/L	0.150	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-02	2024/02/12	13:45
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Nitrite-Nitrogen, Total	7723-37-9	<0.00200	mg/L			U	NR	mg/L	0.250	mg/L	SM 4000 F E	Alex Laboratories	A30845-02	2024/02/28	20:51
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Orthophosphate Phosphorus, Total	26488-19-9	0.0176	mg/L			H-12	NR	mg/L	0.0200	mg/L	SM 4000 F E	Alex Laboratories	A30845-02	2024/03/01	18:23
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	pH Temperature (deg C), Total	7723-14-0	20.9	°C			H-12	NR	mg/L	0.100	0.1 g/L	SM 4000 F B	Alex Laboratories	A30845-02	2024/02/28	19:05
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Phosphorus, Total	7723-14-0	0.150	mg/L			U	NR	mg/L	0.100	mg/L	SM 4000 F E	Alex Laboratories	A30845-02	2024/02/28	19:05
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Total Suspended Solids, Total	TSS	84.0	mg/L			NR	mg/L	5.00	mg/L	SM 2540 C	Alex Laboratories	A30845-02	2024/03/06	18:28	
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Zinc, Dissolved	7440-66-6	0.024	mg/L		H-12	NR	mg/L	0.0400	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-02	2024/03/12	11:42	
SW 15 FARM04S	2024/02/18	11:00	PST	Water	Sample-Routine	SW 15 FARM04S 202402181100 Composite	Zinc, Total	7440-66-6	0.067	mg/L			U	NR	mg/L	0.0400	mg/L	EPA 200.8 (Dis)	Alex Laboratories	A30845-02	2024/03/12	11:42
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Ammonia as N, Total	NH4	<0.200	mg/L		U	NR	mg/L	0.0200	mg/L	SM 4000 H G	Alex Laboratories	AD0103-02	2024/04/09	12:52	
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Biochemical Oxygen Demand, Total	8005	<0.27	mg/L		U	NR	mg/L	2.17	mg/L	SM 5210 B	Alex Laboratories	AD0103-02	2024/04/15	13:07	
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Calcium, Total	7460-70-2	12.0	mg/L			U	NR	mg/L	0.400	mg/L	EPA 200.8 (Dis)	Alex Laboratories	AD0103-02	2024/04/15	13:07
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Copper, Total	7460-50-8	0.00317	mg/L			H-12	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	AD0103-02	2024/04/10	00:05
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Copper, Dissolved	7460-50-8	0.00317	mg/L			H-12	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	AD0103-02	2024/04/10	00:05
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	E, Coli, Total	Ecol	308	MPN/100 mL		U	NR	MPN/100 mL	1.00	MPN/100 mL	SM 9213 B	Alex Laboratories	AD0103-02	2024/04/09	10:58	
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Hardness, Total	HA00	51.2	mg CaCO3/L		U	NR	mg CaCO3/L	2.12	mg CaCO3/L	SM 240B	Alex Laboratories	AD0103-02	2024/04/11	12:12	
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	HEM (DI and Gressel), Total	HEM	<5.81	mg/L		U-01	NR	mg/L	5.81	mg/L	EPA 1664B	Alex Laboratories	AD0103-02	2024/04/16	10:15	
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Lab Filtration (prep only)/REM/DVE	PREP	N/A	N/A	N/A	H-12	NR	N/A	N/A	N/A	NA	Alex Laboratories	AD0103-02	2024/04/15	10:12	
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Lead, Total	7489-92-1	0.00300	mg/L			H-12	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	AD0103-02	2024/04/18	13:47
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Lead, Dissolved	7489-92-1	<0.00200	mg/L			H-12	NR	mg/L	0.00200	mg/L	EPA 200.8 (Dis)	Alex Laboratories	AD0103-02	2024/04/18	13:47
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Magnesium, Total	7489-95-4	0.765	mg/L			H-12	NR	mg/L	0.150	mg/L	EPA 200.8 (Dis)	Alex Laboratories	AD0103-02	2024/04/09	13:07
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Nitrite-Nitrogen, Total	7723-37-9	0.00443	mg/L			U	NR	mg/L	0.250	mg/L	SM 4000 F E	Alex Laboratories	AD0103-02	2024/04/09	13:07
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Orthophosphate Phosphorus, Total	26488-19-9	0.0143	mg/L			U	NR	mg/L	0.0200	mg/L	SM 4000 F E	Alex Laboratories	AD0103-02	2024/04/09	13:07
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	pH, Total	7723-14-0	7.6	pH Units		H-12	NR	pH Units	0.100	0.1 g/L	SM 4000 H B	Alex Laboratories	AD0103-02	2024/04/08	18:03	
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	pH Temperature (deg C), Total	7723-14-0	21.5	°C			U	NR	mg/L	0.100	0.1 g/L	SM 4000 F B	Alex Laboratories	AD0103-02	2024/04/08	18:03
SW 15 FARM04S	2024/04/08	10:45	POI	Water	Sample-Routine	SW 15 FARM04S 202404081045 Grab	Phosphorus, Total	7723-14-0	0.160	mg/L			U	NR	mg/L	0.100	mg/L	SM 4000 F E	Alex Laboratories	AD0103-02	2024/04/11	17:21
SW 15 FARM04S</																						