Introductions



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WILLAMETTE INTAKE FACILITIES COMMISSION

Source Water Protection Planning for the Willamette Intake Facilities Commission

PNWS-AWWA
Thursday, May 7, 2026
8:30 – 9:30AM

Agenda

I. Introductions

II. About the Willamette Intake Facilities (WIF) Commission

   a) Mission, Vision, Values & Goals

III. Key Elements of Source Water Protection Plan

IV. Initial Steps to Implement the Plan

V. Implementation Priorities: What's Next

VI. Questions

What is *Source Water Protection*?

The practice of **safeguarding, maintaining, or improving the quality and quantity of drinking water sources**. This involves identifying risks to a water source (like rivers, lakes, or groundwater) and implementing a plan to prevent contamination. The goal is to **protect drinking water from source to tap.**



Source: American Water Works Association

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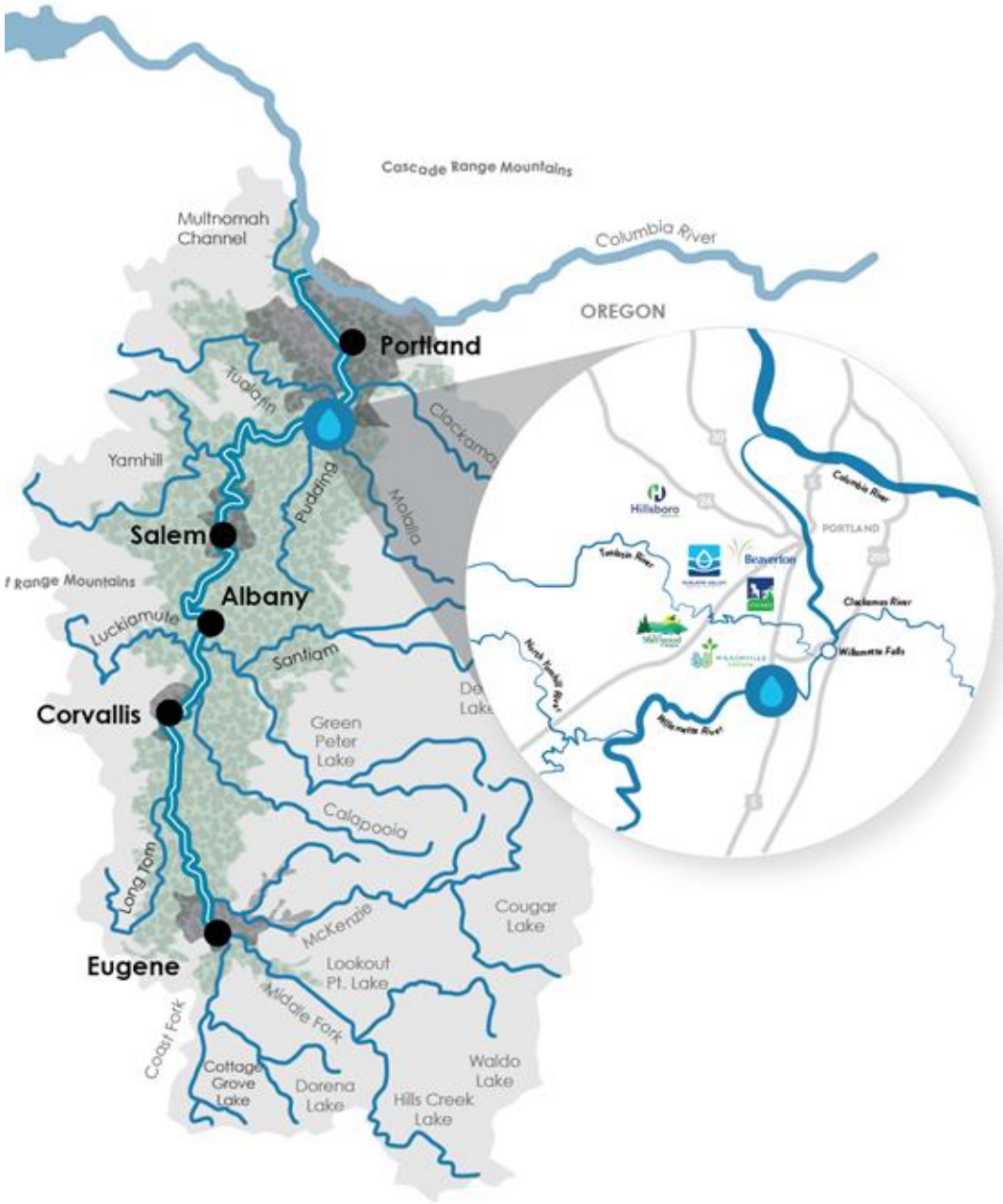
About the WIF Commission

WIF Commission

A partnership focused on protecting and preserving the Willamette River as a drinking water source.

Formed in 2018, the Commission oversees the Willamette Intake Facilities, which draw river water for treatment and currently serves 45,000 customers in the cities of Sherwood and Wilsonville.

In late 2026, the facilities will expand operations to serve an additional 350,000 people in Washington County through the new Willamette Water Supply System.



Mission, Vision, Values & Goals

- Developed over 9 months in 2020 and 2021.
- **Four workshops** with the partner agencies were held to solicit perspectives, input, and insights to develop the MVV&G document.
- The document was reviewed by the Board and adopted July 26, 2021.
- **The document guides the Commission's decision making today.**

Mission
To responsibly secure a safe and reliable Willamette River drinking water supply for our communities.

Vision
To become a trusted steward of the Willamette River watershed.

Values
To conduct business in a manner that is unified, responsible, and reliable.

The Three Pillars

The pillars hold up the Mission and Vision and give focus to the goals.



Water Quality Protection

We engage in addressing **existing, emerging and potential risks** that may impact water quality at the intake facility ahead of treatment.



Water Supply Stewardship

We **pursue access to reliable water supply** to meet the needs of the region and participating agencies.



Effective WIF Operations

We are dedicated to effective utility management to **deliver consistent operations and quality service** to our communities.

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Creating the Watershed Protection, Monitoring, & Outreach Plan

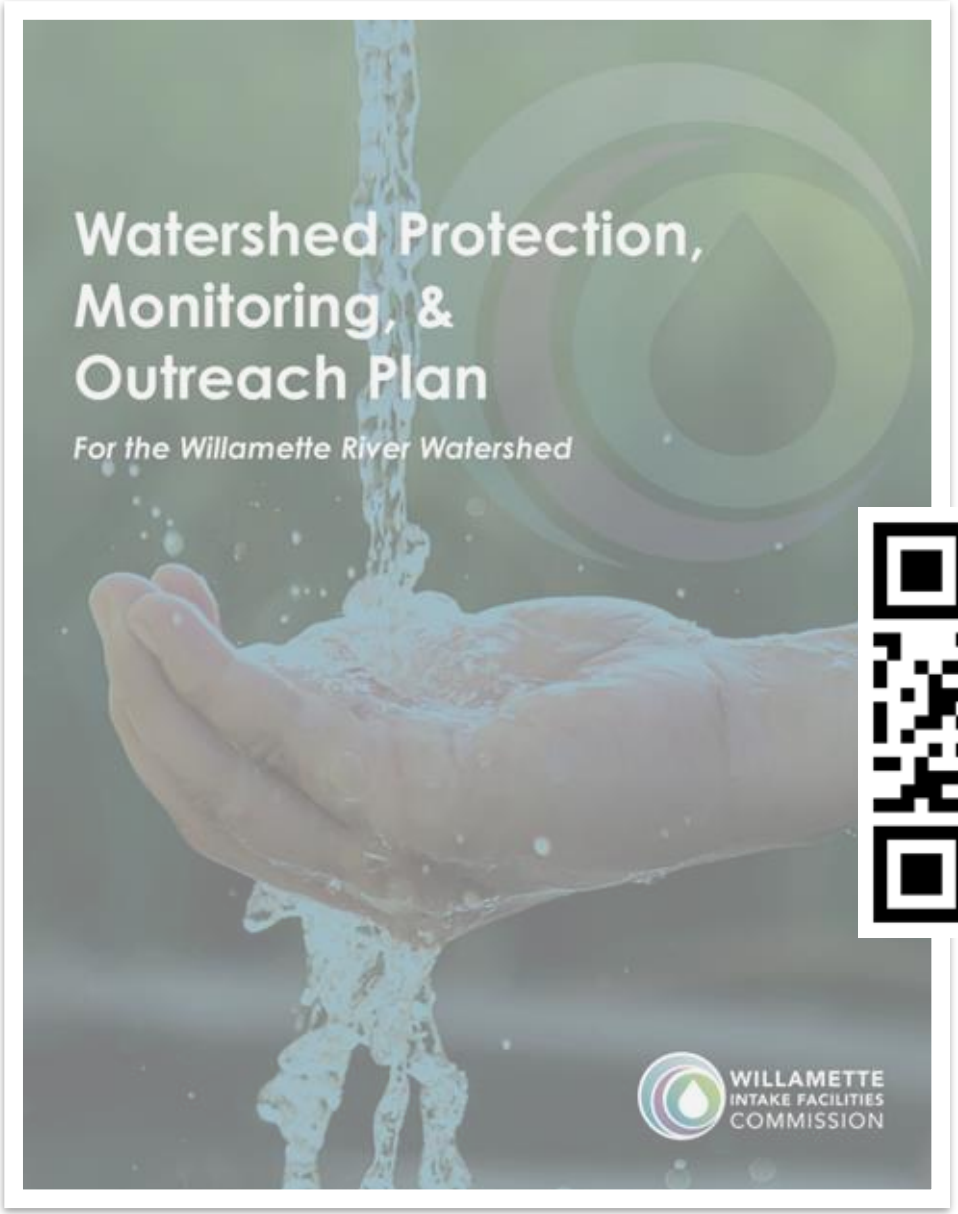
The process, stakeholder input, & key Plan elements

Background

Watershed Protection, Monitoring, & Outreach Plan (the Plan)

Developed by the Commission beginning in 2022 in partnership with a consultant team. It was adopted in April 2024.

Purpose: To identify water quality risks and recommend strategies to protect the Willamette River as a viable drinking water source for current and future users.



SCAN TO READ THE PLAN

A Stakeholder-informed Plan

- Created a robust basin-wide stakeholder list
- Board members, Commissioners, and agency staff were interviewed
- Virtual meetings were hosted to introduce the Commission and learn about current projects, information needs, and gaps in knowledge
    - ✓ Meetings included DEQ, USACE, USGS, cities, NGOs, etc.

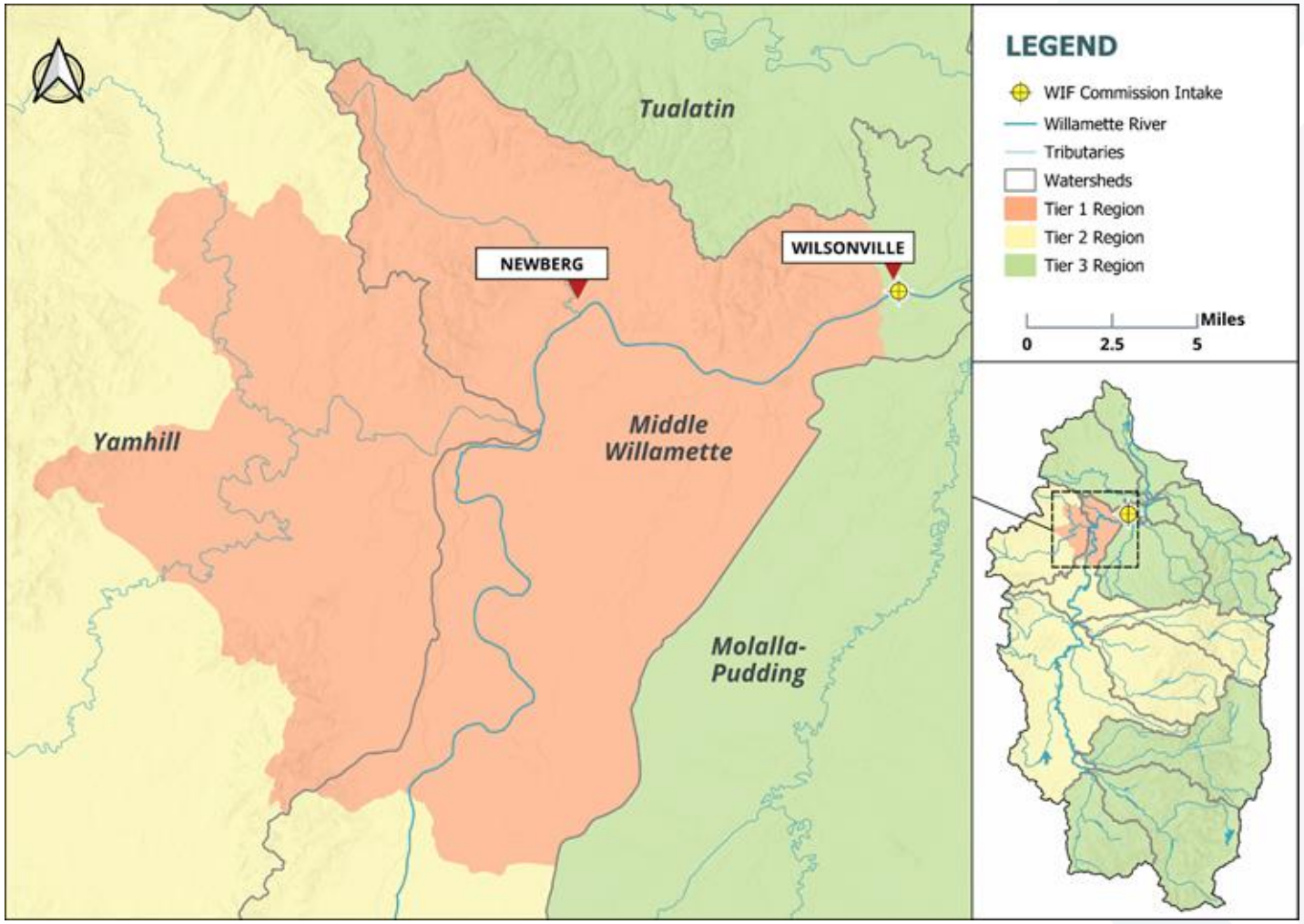


A Collaborative Approach

The Commission is dedicated to collaboration across the watershed. We are committed to learning from and partnering with existing watershed stakeholders who have been conducting source water protection activities for decades.



The Geographic Area Studied



Tier 1 is immediately upstream of the Intake Facilities and is the emergency response region. It extends 35 miles upstream of the Intake and includes lower reaches of the North and South Yamhill River.

Tier 2 indicates a secondary area for management and risk reduction.

Tier 3 includes the full Willamette Basin including headwaters and areas downstream of the intake.

Plan Table of Contents

I. Watershed Overview

II. Water Availability & Source Water Quality

III. Risk Assessment

IV. Watershed Protection

V. Watershed Monitoring

VI. Strategic Communication & Outreach

VII. Implementation Plan

VIII. Adaptive Management

Key Assessments in the Plan

Potential Contamination Sources

The Drinking Water Protection Potential Contamination Sources (PCS) database, compiled by the Oregon DEQ, was used to identify sites and facilities with higher risks to water quality.

Travel Time Risk Score

An analysis was conducted to assign a risk score to each PCS based on the contaminants' estimated travel time to the Intake Facilities.

Influence Risk Score

A risk analysis was conducted to evaluate the potential toxicity of PCS risks at the intake based on potential concentration, to identify contaminants posing the highest risks. This set the priorities for monitoring and outreach recommendations.

This helped us prioritize risks to best manage them, particularly in Tier 1.

Recommendations to Mitigate Water Quality Risks

Emergency Response Program

Create a plan to efficiently and successfully respond to an emergency. Prepare with tabletop exercises, partner coordination, and spill response protocol.

Monitoring & Sampling

Monitor at the intake facilities and explore monitoring near the existing USGS gage at Newberg to provide advanced warning of water quality impacts.

Agricultural Partnerships

Collaborate with NRCS and SWCDs to pursue projects and funding that promote preservation. Build partnerships with public agencies focused on land management.

Septic System Program

The Commission will work with and support existing County programs to reduce pollution from septic systems.

ONGOING OUTREACH AND FUNDING EFFORTS

Stakeholder Engagement Recommendations

Promote collaboration for effective emergency response

Promote opportunities to share monitoring data among stakeholders

Promote partnerships to prevent agricultural runoff, erosion, and pollution

Local, state & Federal agencies, non-governmental groups, Tribal communities

Position the Commission as a trusted leader and resource hub

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Beginning Implementation

Activities Conducted January to June 2025

Key Activities Completed

January to June 2025

Assessed work and challenges of Local Emergency Planning Committees to address gaps*

Identified additional funding opportunities

Created Water Quality Monitoring, QAPP, and Geographic Response Plan outlines

Identified and prioritized pesticides for potential screening & monitoring

Began engagement with Soil & Water Conservation Districts

Key Documents Produced

Outlines of the following were created:

Water Quality Monitoring Plan

Defines objectives, spatial coverage, and sampling requirements. Specifies needed instruments and expectations for their maintenance and calibration. Outlines how data will be processed, validated, stored, and used according to quality standards.

Quality Assurance Project Plan (QAPP)

Defines participant roles, project details, regulatory criteria, quality objectives, documentation standards, and the sampling design with its procedures and QC requirements. Explains how compliance with the monitoring plan and QAPP will be checked and how data will be evaluated for usability.

Geographic Response Plan (GRP)

Outlines the mission, goals, roles, and command structure that guide emergency response, along with scenario-based procedures for various source water emergencies. Identifies contingency water supplies and establishes a communication framework for all phases of an emergency.

The Geographic Areas

Tier 1: High priority (35 miles closest to the intake)

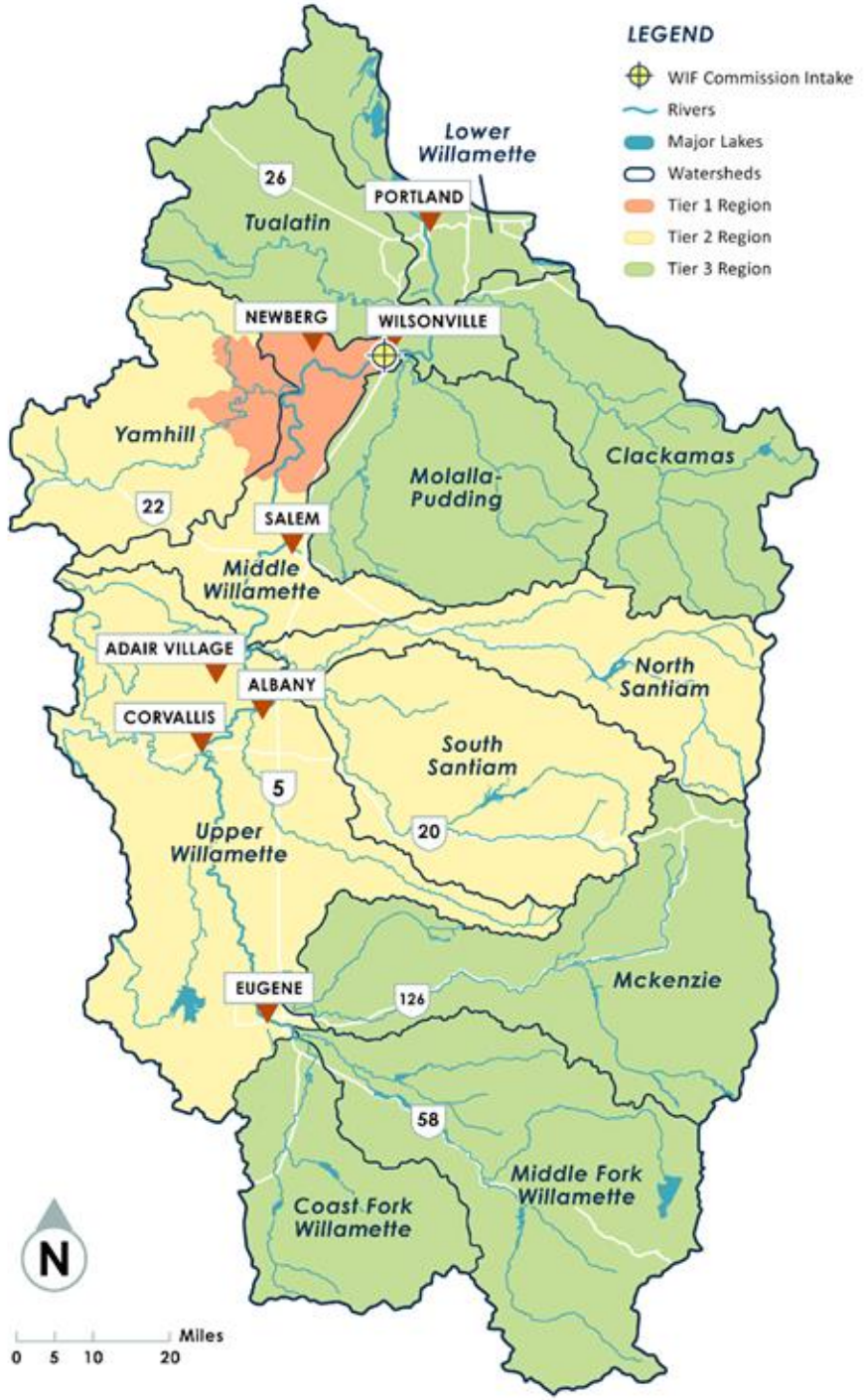
- Higher risks from spills, pollutant loading, algal blooms
- **Strategy: Engage with partners to mitigate risks**

Tier 2: Medium priority

- Willamette Valley Project Management
- More time to respond to incidents
- Track for seasonal disturbances to water quality
- **Strategy: Collaborate and coordinate with other drinking water utilities**

Tier 3: Lower priority

- Willamette Valley Project Management
- Policy changes such as the Willamette Reallocation Project
- Climate change, trends in agriculture, population growth, etc.
- **Strategy: Monitor watershed-wide activities, policies and developments, and created regional partnerships.**



Monitoring Overview

Importance

Monitoring activities are vital in quickly and effectively responding to emergencies, and to understanding trends in water quality, including those that may pose a risk to the drinking water supply. This is particularly important in Tier 1, immediately upstream of the intake.

Activities Conducted

The Managing Agency talked to USGS, Commission partners, and technicians in May 2025 to understand current monitoring efforts and get feedback on ideal monitoring locations.

These conversations will inform the Monitoring Plan and QAPP documents.



Geographic Response Plan Overview

Importance

Effective spill prevention and response reduce spill occurrence and minimize impacts, which is essential for protecting drinking water sources.

Cross-agency preparation and coordination strengthen source-water protection by identifying risks and ensuring a well-practiced, proactive, and effective response.



Activities Conducted

The Commission held conversations with key organizations, including three local emergency planning committees.

Outcomes included a greater understanding of agencies' staff capacity, their challenges in planning for spills, and how utilities can better integrate spill response into their strategies.

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Agricultural Partnerships Overview

Importance

Soil and Water Conservation Districts (SWCD) are trusted community resources with a more direct connection to landowners and farmers than does the Commission.

The Commission seeks to learn from and partner with SWCDs to mitigate contaminants in the watershed.

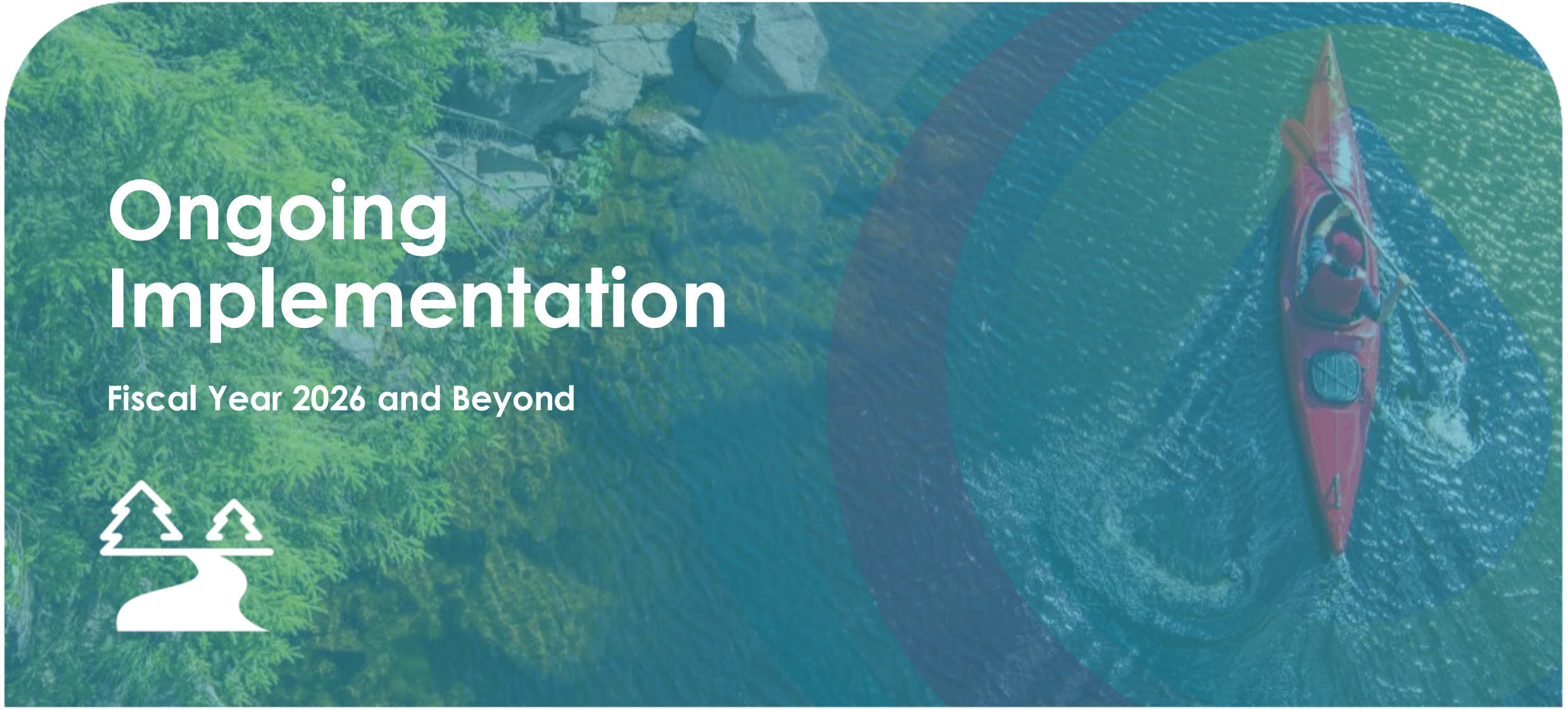


Activities Conducted

- Spoke individually with Marion, Yamhill and Clackamas SWCDs to introduce the Commission and its mission and goals.
- Held a joint meeting on June 28, 2025 with the three SWCDs to identify specific partnership opportunities.

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Ongoing Implementation

Fiscal Year 2026 and Beyond

Implementation Priorities: What's Next

Monitoring

- Develop the Watershed Monitoring Plan and QAPP
- Implement monitoring starting in Fall 2026

Geographic Response Plan

- Strengthen relationship with emergency response agencies
- Develop GIS-supported Geographic Response Plan

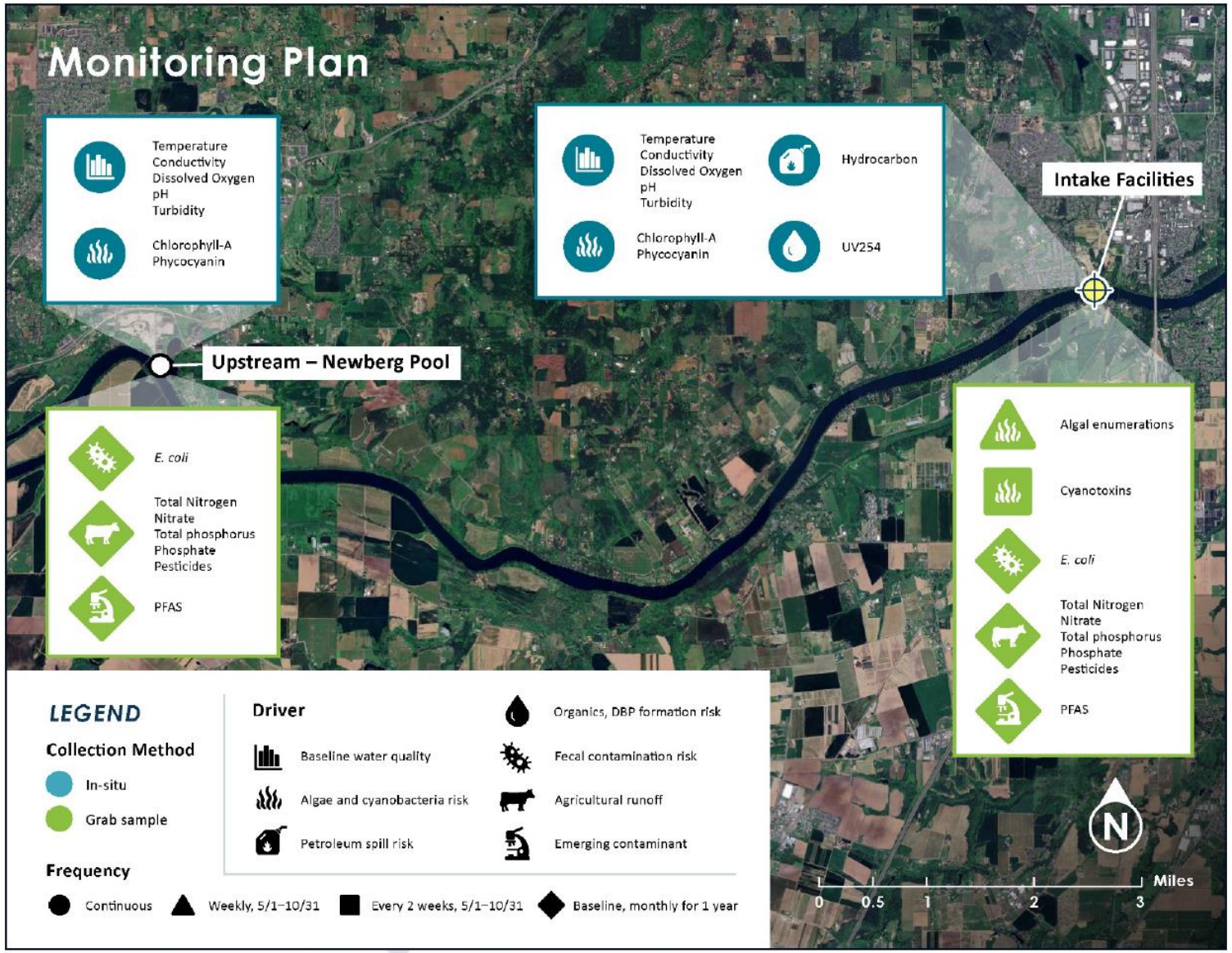
Outreach

- Annual Stakeholder Outreach Plan State of the Watershed Report

Grant Funding Strategy

- Track and identify funding opportunities

Watershed Monitoring Plan



Parameter	Location	Frequency
Algal enumeration	Intake	Weekly May-Oct
Cyanotoxins	Intake	Biweekly May-Oct
E. coli	Intake, upstream	Monthly + Storm Events
Total nitrogen	Intake, upstream	
Nitrate	Intake, upstream	
Total Phosphorus	Intake, upstream	
Phosphate	Intake, upstream	
Pesticides	Intake, upstream	
PFAS	Intake, upstream	
TOC/DOC	Intake	Monthly

The Quality Assurance Project Plan (QAPP) defines the procedures, roles, and quality standards that govern how monitoring data are collected, validated, and used

Online Monitoring

- Continuous raw water monitoring provides real-time data to detect water quality changes and support rapid response before impacts reach the intake
- Coordinating with USGS and City of Newberg to evaluate feasibility of expanding continuous monitoring upstream to the Newberg Pool gauge

Parameter	Location
Temperature	Intake, upstream
Conductivity	Intake, upstream
DO	Intake, upstream
pH	Intake, upstream
Turbidity	Intake, upstream
Chlorophyll-a	Intake, upstream
Phycocyanin	Intake, upstream
Hydrocarbon	Intake
UV254	Intake

Geographic Response Plan

- Development is underway, building on the risk framework and tiered geography outlined in the Plan
- Focus in 2026 is on foundational research.
- A draft GRP is anticipated mid 2027
  - *Includes tabletop exercises to strengthen readiness with emergency response partners*



Annual Watershed Impact Report

- Communicates source water protection activities, partnerships, and progress toward Plan goals
- Programmatic approach, not only technical monitoring data.
    - Appeals to general audiences, increasing readership. Prioritizes graphics and brevity.
    - Allows flexibility in content
- Demonstrates progress to stakeholders. Friendly for general audiences.
    - Reduces barriers that prevent engagement



Annual Stakeholder Outreach Plan

- Guides outreach strategically to advance goals
  - Provides a holistic view for decision-making; ensures we stay aligned with MVVG
- Technical and outreach activities continuously inform one another.
  - Outreach efforts grow with the program.
- Builds on stakeholder mapping and outreach conducted during Plan development
- Identifies target audiences, engagement methods, and timing to ensure consistent, coordinated outreach



Grant Funding Strategy

1. Grant funding is key to advancing source water protection, as these activities often compete with core utility operations for resources

2. Materials developed in 2025 provide a foundation for a proactive grant tracking and pursuit process

3. Eligible projects may be led by the Commission or pursued collaboratively with partners, broadening opportunities

4. Positions the Commission to move **quickly** when opportunities open rather than building applications from scratch

Summary

We want to preserve and protect water quality in the Willamette River

We are committed to serving as a trusted regional resource for source water protection

We are expanding our outreach and engagement in 2026 and beyond

What Questions Do You Have?

EMAIL US WITH YOUR QUESTIONS OR COMMENTS!

Thank you for attending!

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