State of Oregon
Department of Environmental Quality Memorandum

Date: April 23, 2018

To: Environmental Quality Commission

From: Richard Whitman, Director

Subject: Item A, Informational item: Tour introduction
May 10-11, 2018, EQC meeting

Purpose of item

Project partners will co-present information to prepare the commission for a morning tour of sites near The Dalles.

Background

On May 10, the commission will visit two sites near The Dalles where significant state and local investments have resulted in improved water quality. This pre-tour informational item will provide contextual information about the regulatory and voluntary programs, the data collection framework and limits associated with implementation in the area. Presenters will also discuss the history of the area, including past and current agricultural activities, contemporary urban growth and opportunities for water quality protections and restoration.

Regulatory and voluntary framework and water quality assessment

DEQ has authority to implement the Water Quality Nonpoint Source Program through the Clean Water Act Section 319, various state statutes and through Total Maximum Daily Loads. For water quality affected by agricultural activities, the Oregon Department of Agriculture implements the agricultural water quality program for the State of Oregon through area rules and plans that have been adopted by ODA. Oregon statute and administrative rules require ODA to consult with DEQ during the biennial review of Agricultural Water Quality Management Area Rules and Plans.

ODA's Agriculture Water Quality Program is outcome based, explicitly describing prohibited conditions, similar to DEQ's TMDL and nonpoint source programs that explicitly define water quality targets and goals. The analysis of landscape conditions and water quality data is used for implementing these programs as well as identifying data gaps. ODA area rules are regulatory requirements and enforceable while area plans are voluntary. In many areas around the state it is the combination of area rule compliance with area plan implementation that is needed to achieve water quality standards and TMDL allocations.

DEQ uses instream water quality data and riparian condition collected from a variety of sources for Oregon's watersheds to understand the instream water quality status and trends as well as riparian condition.

Several impediments exist for the successful implementation of DEQ's water quality programs. These impediments include limited resources for data interpretation of area rule compliance and area plan achievement; the limited frequency of spatial and temporal data collected for instream water quality and riparian condition by DEQ and collaborators; and how to address "legacy" conditions, or the historical presence of impairments.

Investments in and near The Dalles

A coalition of state and local agencies have collaborated in and near The Dalles for decades to respond to water quality concerns. DEQ, the Oregon Department of Agriculture, the National Resources Conservation Service, Oregon Watershed Enhancement Board and the Wasco County Soil and Water Conservation District, and sub-district of The Dalles SWCD, have all committed resources to the watersheds in and near The Dalles, in both urban and rural environments. Some entities have been working in and near The Dalles since the 1940s, in response to Depression-era water quality pressures and the need for safe water in and near The Dalles to support local residents and a robust agricultural sector.

The Oregon Department of Agriculture identifies Strategic Implementation Areas across the state to assist with targeted investment and technical assistance to agricultural centers at risk of not meeting water quality standards. ODA identified Mill Creek as a Strategic Implementation Area in the 2014-15 project season, and designated Threemile Creek as a Strategic Implementation Area in the 2015-16 season.

The Oregon Watershed Enhancement Board has also provided focused investment to The Dalles area through financial and technical assistance. The projects, ranging from small one-time to multi-year monitoring and restoration project grants, supported investments for fish habitat studies in Threemile Creek, streamside plantings at multiple sites, monitoring in fish-bearing streams and the development of educational and demonstration projects across Wasco County.

The investments from state and federal agencies are implemented in partnership with local entities.

Wasco County and The Dalles

Wasco County is in north-central Oregon, with the Columbia River as its northern boundary from approximately Mosier, east of Hood River, to Celilo. The county goes south toward Warm Springs, with multiple small towns and communities spread throughout its 2400 square miles bordered by the Deschutes River, high desert and mountains. It is home to approximately 25,000 people, and The Dalles serves as the county seat and center for most commercial activities in the region.

Much of the commerce in and near The Dalles is focused in agricultural production, and the Port of The Dalles is a large working port along the Columbia River. DEQ and others have worked extensively with farmers around The Dalles to reduce the use of pesticides after finding levels of malathion above water quality standards, an insecticide used in the cherry industry.

In recent decades, the population of The Dalles has grown to nearly 16,000 people, which lead to increased pressure on the wastewater infrastructure and urban water quality. Mill Creek was a focused study area for several agencies after monitoring showed high levels of e. coli in the water, especially during the summer recreational season. These levels were traced back to a previously unknown broken sewer pipe, which was repaired in 2014 and the bacteria contamination levels dropped accordingly. The mix of rural and urban considerations makes Wasco County, and the area around The Dalles, an excellent location for water quality study and improvements.

Attachments and supporting materials

A. Oregon Department of Agriculture Strategic Implementation Areas fact sheet (2017)
B. Nonpoint Source Program, Water Quality Status and Trends page: http://www.oregon.gov/deq/wq/programs/Pages/wqstatustrends.aspx
C. Homepage of The Dalles Soil and Water Conservation District: https://wascoswcd.org/wcswcd_023.htm
D. OWEB Investment Tracking Tool webpage: http://tools.oregonexplorer.info/OE_HtmlViewer/Index.html?viewer=oitt

EQC involvement

No commission action is requested at this time. The commissioners will tour two locations along Mill Creek and Threemile Creek.

Report compiled by Stephanie Caldera
Commission assistant

Strategic Implementation Areas

ENSURING COMPLIANCE WITH AGRICULTURAL WATER QUALITY REGULATIONS

History of the program

In 1993, the Oregon Legislature passed the Agricultural Water Quality Management Act, Senate Bill 1010, directing the Oregon Department of Agriculture (ODA) to develop plans and associated regulations to prevent and control water pollution from agricultural activities and achieve water quality standards. The legislation also required the involvement of Soil and Water Conservation Districts (SWCDs) as much as possible.

Since 1997, program staff have worked with Local Advisory Committees, which include farmers, ranchers, and stakeholders, to develop water quality management plans and adopt regulations in Oregon's 38 water quality regions. The plans give local agricultural landowners a framework in which to comply with the rules. Compliance is required by state law.

Partnerships

"Strategic Implementation Areas" are chosen by ODA after discussions with partners, and review of local information and water quality data when available.

- SWCDs are a key partner in making Oregon's Agricultural Water Quality program a success.
- SWCDs work with willing landowners to complete voluntary agricultural water quality improvement projects.

Partner agencies and organizations support SWCD projects with technical and financial assistance to make additional water quality improvements. The Oregon Watershed Enhancement Board (OWEB), USDA Conservation Reserve Enhancement Program (CREP), Natural Resources Conservation Service, and watershed councils, among others, provide substantial resources to improve Oregon's agricultural water quality.

Strategic Implementation Areas

Agricultural Water Quality Violations

Before

After

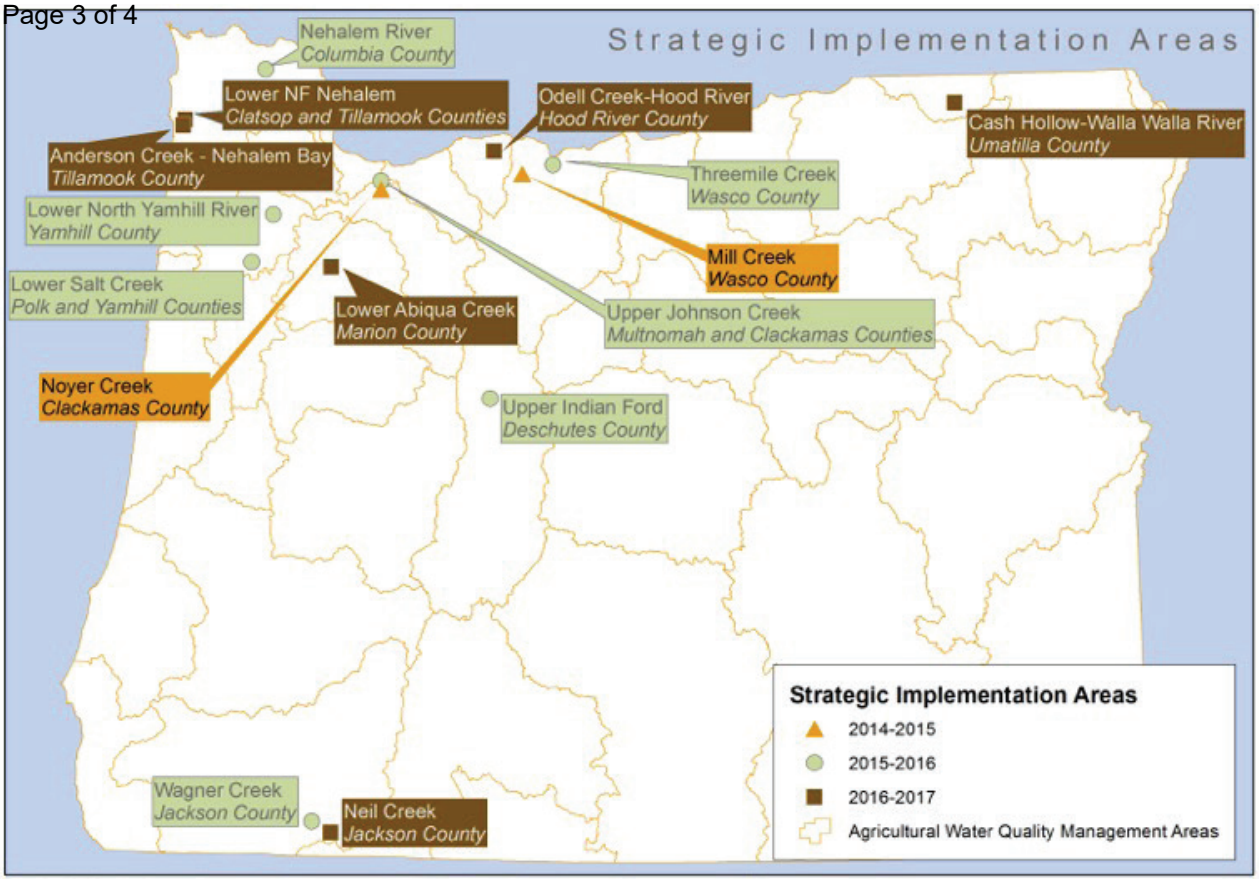
Before

After

Implementation

In the early 2000s, ODA's focus was to implement as many agricultural water quality improvement projects as possible and document those accomplishments. Efforts focused on outreach and technical help to create projects that would achieve immediate water quality benefits and build the foundation for strong partnerships in the future. Oregonians have made tremendous investments to protect and improve our water quality.

Scientific studies and technical documents from university researchers, the USDA, and other federal agencies show the types of projects implemented improve water quality at the farm scale. However, it has been a challenge to document the benefits of these projects on a larger scale and to measure what percent of the area is in compliance.



Strategic Implementation Areas

As the Agricultural Water Quality Program matures, we must adapt and gather more data, and document accomplishments to meet Oregon's water quality goals. Comparing the scale of accomplishments within a larger scope will help ODA and its partners better track progress and estimate the costs of treating remaining areas. Water quality goals can be achieved by promoting voluntary cooperation among landowners and natural resource partners to address management concerns, and by ODA enforcing water quality regulations.

ODA is applying the Strategic Implementation approach, where selected areas around the state will receive outreach and education to address priority water quality concerns. Following an ODA-led Compliance Evaluation, ODA and its partners will work with agricultural landowners to concentrate technical and financial help to change agricultural activities that may be reducing water quality. Following outreach and assistance, ODA may enforce regulations where problems persist.

Strategic Implementation Areas are chosen by ODA after discussions with partners and a review of local information and water quality data when available.

ODA and program partners believe that strategic, focused, and systematic delivery of outreach and technical assistance will lead to greater Program effectiveness and allow ODA and SWCDs to make better use of limited resources.

Where can I find the Plan and Regulations for my Area?

Go to oregon.gov/ODA/programs/NaturalResources/Pages/AgWaterQuality.aspx
or call ODA at (503) 986-4700

What's next?

1) ODA will conduct a Compliance Evaluation to identify potential sources of pollution from agricultural activities.
2) ODA will contact landowners who might need assistance. The sooner landowners contact our partners, the more likely they will receive help because partners have limited resources.
3) After landowners have been given a chance to make changes, ODA will track progress toward reducing agricultural sources of pollution.
4) Properties that do not meet the requirements established in the local Area Rules (regulations) may be subject to a compliance investigation and further action by ODA.

What should I do?

Because agricultural pollution comes from diffuse and diverse sources, the program focuses on lands conditions and management that supports clean water and healthy watersheds.

You should evaluate your agricultural activities and try to determine whether they might:

1) Pollute streams, canals, and groundwater, or
2) Prevent growth of appropriate vegetation along streams to stabilize streambanks, provide shade, and filter potential pollutants.

Where can I find...

The Plan and Regulations for my Area?
oregon.gov/ODA/programs/NaturalResources/AgWQ/Pages/AgWQPlans.aspx

My local Soil and Water Conservation District?
oacd.org/conservation-districts/directory

The ODA Water Quality Specialist for my Area?
oregon.gov/ODA/programs/NaturalResources/AgWQ/Pages/AgWQResources.aspx

OREGON DEPARTMENT OF AGRICULTURE
Water Quality Program

Oregon Department of Agriculture

Agricultural Water Quality Management Program
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