

CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

Policy Session Worksheet

Presentation Date: 11/27/18 **Approx. Start Time:** 1:30 PM **Approx. Length:** 60 minutes

Presentation Title: County Surface Water Management Planning

Department: Water Environment Services (WES)

Presenters: Ron Wierenga / WES Environmental Services Manager & Greg Geist / WES Director

Other Invitees: Mike Bezner, Dan Johnson / DTD; Nancy Bush, Jay Wilson / Disaster Management; Dawn Emerick, Julie Hamilton, Joel Ferguson, L. Bentley Moses / Public Health

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

This session's purpose is to seek further Board direction on the scope and scale of the county's strategic goal: "By 2020, Clackamas County will adopt a Master Plan for surface water management that will enhance the quality of surface water."

EXECUTIVE SUMMARY:

In the Board's strategic plan, a goal was identified pertaining to surface water management for the enhancement of water quality. There are multiple contexts and lenses through which both county and other organizations services are provided to protect and enhance the quality of the county's surface waters. These include but are not limited to regulatory frameworks, geography, and organizational authorities and funding.

Under a regulatory framework of the Clean Water Act, many of the rivers and streams of Clackamas County are designated as water quality impaired, and limits of certain types of pollutants placed on them became part of the TMDL ("Total Maximum Daily Load") criteria for each watershed, with agencies like the county and cities charged with improving water quality in these watersheds. In addition to the TMDLs, other regulatory frameworks are applicable to the waters of Clackamas County, such as: safe drinking water, salmon and steelhead protection, urban stormwater runoff (known as 'MS4,' or Municipal Separate Storm Sewer System), and State planning goals. In the early 1990s, the Board of County Commissioners ordered specific language in two of WES' service districts to "maintain water quality and quantity". WES works alongside community partners and other County departments in carrying out these directives, specifically with DTD, Disaster Management, and Public Health.

From a geographical perspective, the county's surface water programs implemented by WES are focused on the urbanized area of the county, and other departments' authority is countywide. However, in the rural area, surface water management programs focus on road operations and maintenance, land use and development permits, and drinking

water source protection. Extending beyond the urban growth boundary, before the border of national forest land, lies an expansive rural residential and agricultural area where nonpoint source pollutants contribute to the impairment of Clackamas County's rivers. A complicated oversight framework involves various state agencies, including the Departments of Environmental Quality, Agriculture, and Forestry.

The lack of a unifying authority and surface water management plan is a challenge in water quality management. Similarly, the mechanisms that fund these efforts are also varied. Rates and fees, county general fund and road fund, and various state and federal grants all support different components of the efforts that are carried out by county departments.

Beyond the services that the county provides, there are numerous other government and non-profit organizations that help play a role in the watershed health of the County's rivers and streams. Their work is valuable and their stakeholder input is key moving forward.

The scope and scale of a surface water management plan for water quality can vary greatly. The county could initiate a plan to better coordinate among departments the current services under existing authorities and funding. This could be done by writing a single, unifying water quality management plan to meet regulatory mandates, which would build on a similar effort that was recently completed to unify stormwater management efforts in the urban area. An additional step would be to identify gaps and opportunities for expansion of county surface water management services, which would also include a discussion of additional authority and funding necessary to implement the plan. A further option would look beyond the services that the county provides and create a surface water management plan. This would involve broad engagement with government and non-government partners in water quality planning and implementation. Furthermore, this effort would include a broad discussion of additional authority and funding necessary to implement the plan.

FINANCIAL IMPLICATIONS (current year and ongoing):

Is this item in your current budget? YES NO

What is the cost? Ranges from \$50k – \$300k, dependent upon direction on the scope of planning.

What is the funding source? TBD

STRATEGIC PLAN ALIGNMENT:

- How does this item align with your Department's Strategic Business Plan goals?

This aligns with WES' goals in ensuring that Clackamas County communities are aware of their impact on water quality.

- How does this item align with the County's Performance Clackamas goals?

This aligns with the County goal of “Honor, Utilize, Promote and Invest in our Natural Resources.”

LEGAL/POLICY REQUIREMENTS:

Depending on the direction of the Board, there may be legal or public policy implications that need to be resolved in order to ensure proper implementation of a plan when completed.

PUBLIC/GOVERNMENTAL PARTICIPATION:

Depending on the direction of the Board, public and governmental participation would be designed to ensure appropriate engagement in design and implementation.

OPTIONS:

- 1) Coordinate current county services: coordinate and document TMDL, floodplain and land use planning and development services; maintain existing authority and funding.
- 2) Expand county services to improve water quality; engage county departments (DTD, WES, Disaster Management, Public Health); align county efforts in a consolidated water quality plan, focus on TMDL, floodplain, and planning services; propose authority and funding.
- 3) Create a Watershed Health Plan for Clackamas County; conduct broad engagement with watershed partners; align efforts to improve water quality, propose an authority and funding mechanism.

RECOMMENDATION:


Staff respectfully recommends Option 3, Create a Watershed Health Plan for Clackamas County; conduct broad engagement with watershed partners; align efforts to improve water quality, propose an authority and funding mechanism.

ATTACHMENTS:

None.

SUBMITTED BY:

Division Director/Head Approval _____

Department Director/Head Approval  _____

County Administrator Approval _____

For information on this issue or copies of attachments, please contact Ron Wierenga @ 503-742-4581



Clackamas County Surface Water Management

Ron Wierenga

WES Environmental Services Manager

Previous Board Direction

- Performance Clackamas Strategic Goal:

“By 2020, Clackamas County will adopt a Master Plan for surface water management that will enhance the quality of surface water.”



Molalla River



99.8%

**Of Clackamas County Watersheds
Are Water Quality Impaired**

Clackamas County Water Quality Impairments

TUALATIN RIVER TMDL
- Water Temperature
- Bacteria
- Mercury
- Dissolved Oxygen
- PH & Chlorophyll (Total Phosphorus)

SANDY RIVER TMDL
- Water Temperature
- Bacteria (Cedar Creek Only)

WILLAMETTE RIVER TMDL
- Water Temperature
- Bacteria
- Mercury
- DDT & Dieldrin (Johnson Creek Only)

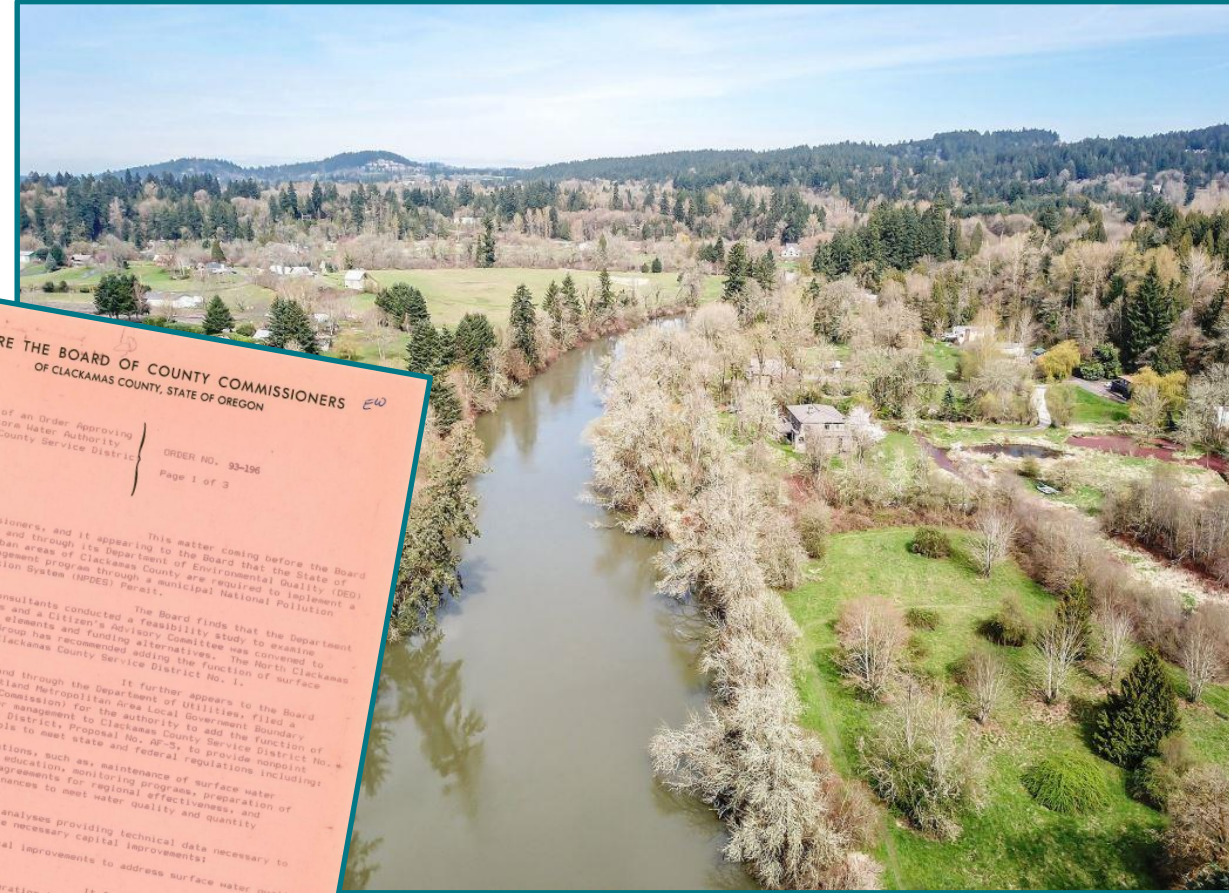
CLACKAMAS RIVER TMDL
- Water Temperature
- Bacteria
- Mercury

MOLALLA-PUDDING RIVER TMDL
- Water Temperature
- Bacteria (Pudding River Only)
- Mercury
- DDT (Pudding River Only)

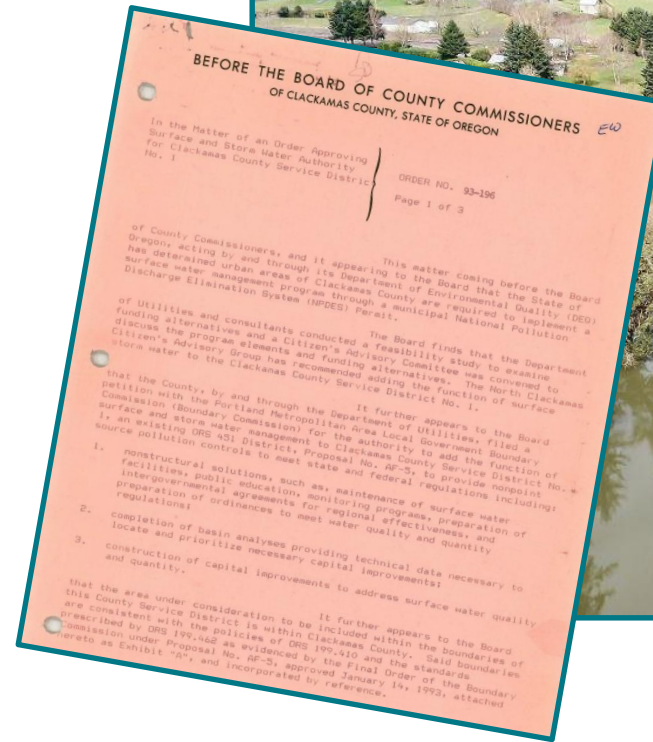


Regulatory Environment

- Municipal Stormwater Permits (“MS4”)
- Total Maximum Daily Load (“TMDL”) Water Quality Management Plans
- Underground Injection Controls
- State/Metro Planning Goals
- River Watersheds Have Many Land Uses and Owners
 - Federal
 - State
 - County
 - Tribal
 - Forest / Agriculture
 - Urban
 - Private
- Formation of county surface water districts SWMACC/CCSD#1 in 1992-3



Tualatin River

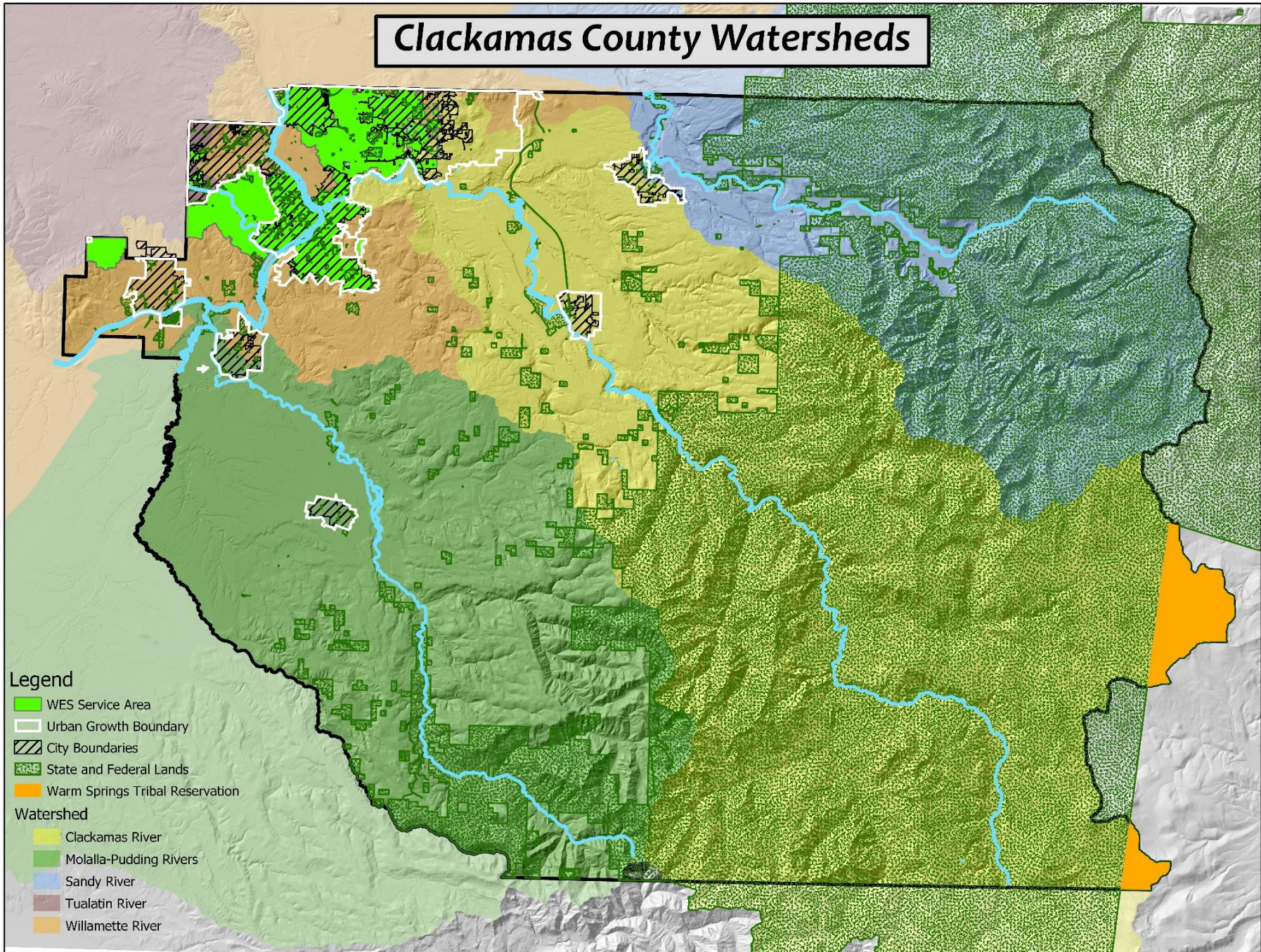


Formation of Surface Water Districts

From Board Orders 93-196 and 92-289:

- Nonstructural solutions such as maintenance of surface water facilities, public education, monitoring programs, preparation of intergovernmental agreements for regional effectiveness, and preparation of ordinances to meet water quality and quantity regulations;
- Completion of basin analyses providing technical data necessary to locate and prioritize necessary capital improvements;
- Construction of capital improvements to address surface water quality and quantity.

Clackamas County Watersheds



Legend

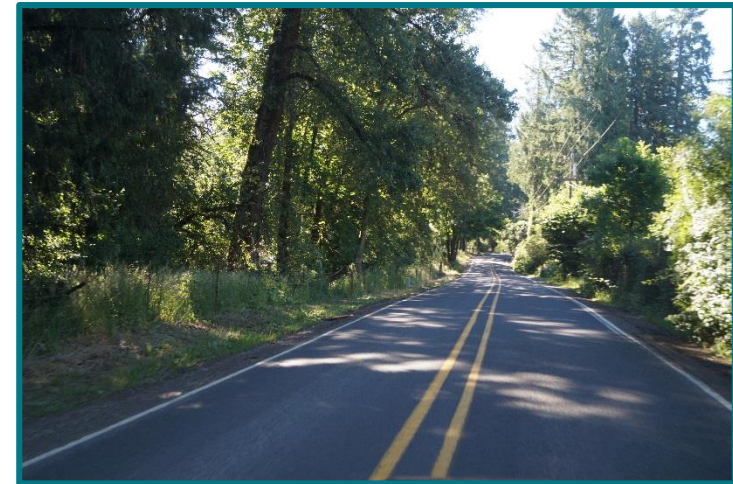
- WES Service Area
 - Urban Growth Boundary
 - City Boundaries
 - State and Federal Lands
 - Warm Springs Tribal Reservation
- Watershed
- Clackamas River
 - Molalla-Pudding Rivers
 - Sandy River
 - Tualatin River
 - Willamette River

Surface Water Management in Clackamas County

- WES
 - Urban Area Watershed Health Programs
 - Capital Improvements and Maintenance
 - Public Education
 - Water Quality Monitoring
 - Basin Analyses
- DTD
 - Road Maintenance
 - Planning
 - Floodplains
 - Habitat / Buffers
 - Grading
 - Septic Systems
- Disaster Management
 - Flood Mitigation / Recovery Support
- Public Health
 - Drinking Water System Oversight / Regulation



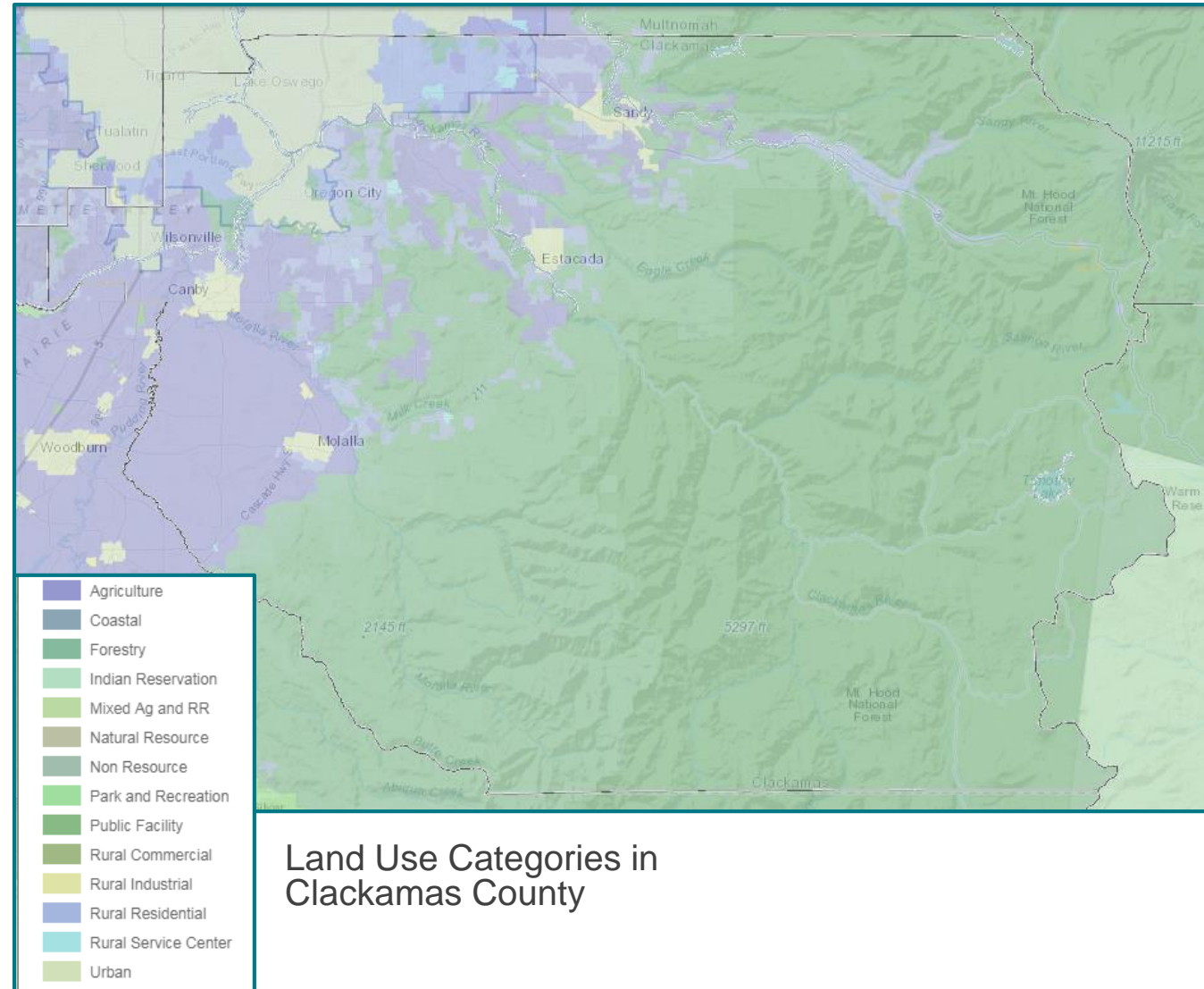
Carver Bridge Over the Clackamas River



County Road With Ditches Near the Molalla River

Existing Authorities

- WES Administrative Rules
- Zoning & Development Ordinances – Cities and County
- OAR 660 – State Planning Goals / Local Interpretations (Cities, Metro)
- Oregon DEQ Administrative Rules Pertaining to Septic Systems and Wells
- Oregon Health Authority – Safe Drinking Water (Surface & Ground Water)



Existing County Funding

- WES: Rates and Fees (via special district), Grants
- DTD: Road Fund and Fees, County General Fund
- Disaster Management: County General Fund, Federal and State Grants
- Public Health: County General Fund; State and Federal Grants



The Longest Functioning Fish Ladder in the World,
Clackamas River – North Fork Dam

River and Stream Flooding is a Major Concern in Clackamas County...

...there is a need for broader floodplain management to improve assessment, planning, and permitting services.



A Watershed Health Plan Can Coordinate County Programs That Offer:

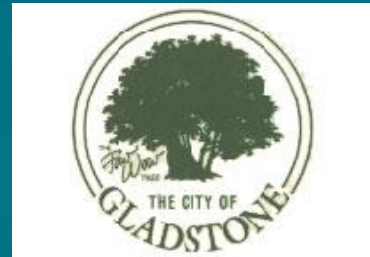
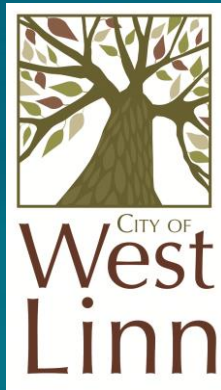
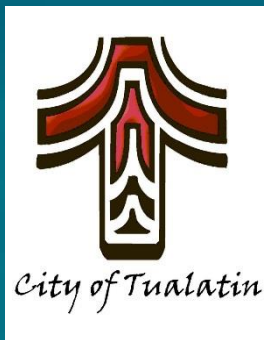
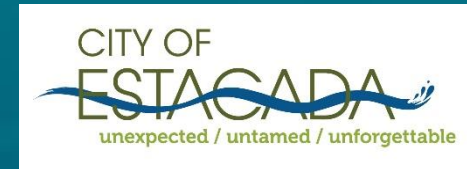
- Water Quality Protection**
- Floodplain Management**
- Planning / Permitting**
- Habitat Improvement**
- Public Health Services**



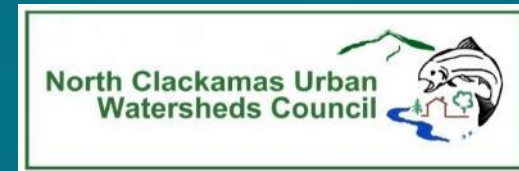
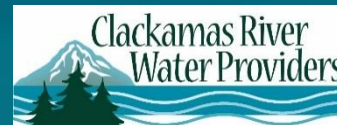
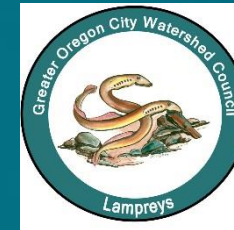
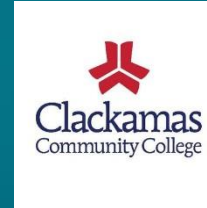
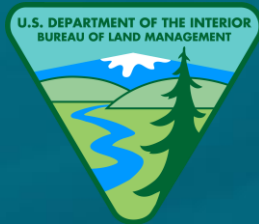
Clackamas County Government Watershed Health Partners



Transportation & Development



Other Watershed Health Partners



Option

01

Coordinate Current County Services

- Coordinate and Document TMDL, Floodplain and Land Use Planning and Development Services**
- Maintain Existing Authority and Funding**

Option
02

Expand County Services to Improve Water Quality

- Engage County Departments (DTD, WES, Disaster Mgmt., Public Health)**
- Align County Efforts in a Consolidated Water Quality Plan**
- Focus on TMDL, Floodplain, and Planning Services**
- Propose Authority and Funding**

Option

03

***Staff Recommendation**

Create a Watershed Health Plan for Clackamas County

- Broad Engagement With Watershed Partners**
- Align County Efforts to Improve Water Quality**
- Propose Authority and Funding**