

# Source Water Protection Workshop

## The Dalles, Oregon

### June 4, 2019

#### **Workshop Goals:**

- To promote and support collaboration among drinking water providers, landowners, and restoration/conservation practitioners to achieve source water protection.
- To discuss water quality challenges and risk reduction strategies on forest lands, wildfire risks and preparedness, and funding opportunities.

**Watershed Challenges:** Mixed ownership and land-use types; different regulatory approaches in OR and WA, threatened or endangered fish; land management impacts; funding constraints.

**Expected Outcomes:** Sharing information and developing new connections. Identifying potential strategies and funding sources for source water protection.

Presentations were provided that discussed drinking water protections and treatment challenges from a regulatory, public water system, and landowner/manager perspective. Panel discussions looked at wildfire risks to drinking water supplies, actions that can be taken pre-, during and post- wildfire, communicating the importance of protecting source water from competing uses.

Attendees were split into one of three small groups for discussions:

#### **Sandy-Mt Hood**

##### Priorities & Common Goals:

- Road management to prevent sediment pollution of water sources
- Weed wash stations at key locations to prevent introduction of invasive species
- Climate change concerns → Higher temperatures and more intense storms increasing water pollution
- Farming activities creating risk for water sources
- Excess turbidity events from storms and/or land management
- Long-term enforceable authorities for source water protection would be helpful
- Private property owner's agreements to prevent contamination and coordinate
- Wildfires are a big concern, especially after Eagle Creek fire
- Emerging contaminants such as pharmaceuticals
- Stability of spring flow decreasing (flow reductions)

##### Relationships & Collaboration

- ODF has a notification system, and US Forest Service is good about notifying - Getting notices and having good relationships with landowners can help with issues
- Differences in land ownership need to be understood in terms of regulations and typical practices

- Developing relationships takes time and effort to find willing participants and gain cooperation. Advice on how to start those conversations wanted.
- NRCS and watershed councils have shared objectives focusing on Drinking Water
- What's good for fish is good for drinking water and vice versa
- Cost-effective post-fire remediation and restoration are desirable
  - o Mulching to prevent erosion
  - o Road and slope failure are biggest concerns
- Managing for fire prevention or reintroduction of fire in a positive way
  - o Wet forest can't be managed as effectively for fire risk reduction as dry forest can
  - o Small fires are desirable and help reduce hazard of large fires

### Implementation Resources:

- Grant writing and reporting requirements are challenging, arduous. Resources are needed for grant writing
- #1 – lack of knowing WHO to go to for help - How to find experts for advice, assistance, and troubleshooting
- OR WARN/forming a coalition for FEMA reimbursement
- Need for mutual aid agreements and collaboration among water systems
- OAWU is a good resource, make use of the circuit rider system

## **Eastside**

### Priorities & Common Goals:

Water system priorities in the Eastside group were very diverse due to each system's geographic location, water availability situation, and source area ownership and management. Several common goals included reducing risks associated with climate change (drought and increased wildfire risk), grazing issues, and adequate management of wildfires in remote and/or steep terrain).

***Walla Walla:*** Mill Creek is FS managed and access is controlled. Fortunate management situation, however fire is a major concern. A large fire would be difficult to control due to steep terrain and lack of road access.

***Pendleton:*** The rail line follows the river; spills would impact the river and potentially downstream intakes.

***Yakama Nation:*** Nutrient management is a key concern. Agriculture is a dominant land use in the basin (apples/hops) and excess nitrate is a product of this. Shallow wells may be at risk. In addition, wild horses are a water quality concern. Grazing is not regulated and has a high impact on watershed health and riparian conditions.

***Forest Service:*** Water is part of the agency's key mandate. Numerous risks to water quality that are of concern include roads/maintenance backlog on roads, livestock grazing, wild horses, and climate change (and associated impacts including invasive species and fire)

**Washington DOH:** Safe and reliable drinking water is their primary concern. Growth equates to increased water use (e.g. Walla Walla and Tri Cities areas). Drought is currently a key challenge, e.g. the Upper Yakama is in drought condition. There is a need for greater redundancy and resiliency, including backup wells for storage.

### Relationships and Collaborations

- Pendleton would like to partner with rail road on emergency response planning
- There was significant interest in engaging more with Confederated Tribes of the Umatilla on drinking water protection
- A number of water systems emphasized the need to build relationships and develop emergency response plans with key partners, well before an emergency occurs.

### What's Next?

- Action item: EPA (Teresa Kubo) will facilitate coordination between Pendleton and EPA emergency response planners. There may be opportunities to plan/practice emergency response on the Umatilla River
- Washington DOH and Yakama Nation need better funding for staff. Yakama Nation's environmental programs are currently not fully staffed and it is challenging just to meet baseline requirements.
- Strategic fencing of Mill Creek (tributary to the Walla Walla River to exclude livestock. This would be a good fit for Drinking Water Providers Partnership funding and Washington DOH (Corina Hayes) will follow up with the City of Walla Walla for the next round of grants.
- Several water systems need to invest resources in priorities such as pipe replacements (where needed), fire risk management, and emergency response planning
- Action item: Oregon DEQ (Josh Seeds) will provide Pendleton information about GRAIP\_Lite, which is a GIS-based tool that can help identify potential sources of road-related sediment. In addition, DEQ (Jacquie Fern) will provide names of other water systems that have received grant awards to use this tool and other approaches for addressing sediment and turbidity.
- Action item: EPA or Washington DOH will send Yakama Nation staff information about Salmon Safe certification program (or other incentive programs) as a potential avenue to work with landowners.

### Information needs

- Many water systems and partners rely on USGS flow gauge stations and when these go offline it is an issue.
- Data from NRCS's snow telemetry (SNOTEL) stations is also an important resource. Need to prioritize supporting these monitoring stations (note that Walla Walla pays for the maintenance of their USGS flow gauges and SNOTEL station (~\$30K/year)
- More information is needed on invasive species monitoring and invasive species distribution; examples include quagga and zebra mussels, but there are others that are threats and not well known.

- Need a managed database for better access to domestic well testing results and well depth data as this would help planners understand pressures on ground water and surface water resources. Washington does not have a real estate transaction well sampling requirement like Oregon. Would be good to pursue this. Well depth data is collected in WA, but not stored anywhere.
- Assistance with identifying sources of contamination, e.g. during high flow events, Pendleton system experiences flushes of high turbidity, but source of that turbidity is unknown.

### Implementation Resources

- There are a number of resources and tools available to water systems and partners that support drinking water protection efforts. These include the Aquatic and Riparian Effectiveness Monitoring Program (AREMP) <https://www.fs.fed.us/r6/reo/monitoring/watershed/> which tracks ecological conditions on lands maintained and/or restored under the Northwest Forest Plan and BLM Western Oregon Resource Management Plan; NorWeST <https://www.fs.fed.us/rm/boise/AWAE/projects/NorWeST.html> which has stream temperature data for waterways across the western U.S; and the PacFish InFish Biological Opinion (PIBO) <https://www.fs.usda.gov/detail/r4/landmanagement/resourcemanagement/?cid=stelprd3845865> which monitors stream and riparian conditions on federal lands throughout the Intermountain West.
- Need a comprehensive plan for how to deal with emergencies such as derailment and wildfire
- GRAIP\_Lite ([https://www.fs.fed.us/GRAIP/GRAIP\\_Lite.html](https://www.fs.fed.us/GRAIP/GRAIP_Lite.html)) can be used to help predict and prioritize potential sources of road sediment
- Needed resource: corporate database that provides public access to well testing data and well depth data in WA

## **Middle Columbia**

### Priorities/Threats

- Wildfire – especially with climate change effects and drier conditions
- Drought – reduced storage and snowpack decline
- Urban/wildland interface – especially visitor impacts on water quality and as a potential fire risk. Forest Health – how to determine status – dealing with different land owners/managers and management standards depending on land ownership
- Agricultural practices and challenges engaging the agricultural community
- Make Emergency preparedness a priority. PWS staff are spread thin and often don't have availability/expertise. Need to know who to talk with and make connections.
- Aerial Spraying
  - o questions around how and when utilities are notified- some more clear than others
  - o Staffing to keep up with review and monitoring can be a challenge

- Uncertainties exist with when to test and what to test for
- too costly to do all
- Nonpoint source pollution – challenges of general public education

### Relationships and Collaboration

For Emergency Response Planning and Action: Activities discussed to enhance relationships and collaboration included the following:

- Importance of understanding Incident Command system -both structure and process. PWS representatives need connect with public information officers (PIOs) well before an emergency situation.
- People wear multiple hats in smaller communities so need to stay in contact – know who to call today
- Suggested planning a tabletop exercise focused on the importance of the drinking water source watershed. – water system can initiate this
- Utilities need to have an internal discussion about what will happen in an emergency? Evaluate what are the priorities for staff, who will operate the plant (especially in small communities, the same staff may be responsible for other areas of the emergency response i.e. fire fighting) In Oregon & Washington make sure that utility is included in Emergency Op Plan at County level NIMS. Also make sure to connect County plans/contacts in water system Emergency Response Plans

For general drinking water protection and enticing people to plan/participate:

- -Make them aware of consequences of not planning (public education and outreach with appropriate messages needed)
- -Stress importance of everyone having a role to play
- -Need to be at the table to be aware of the impacts to your system

Need more Public Education and Engagement

- What level of public understanding do you focus on? Help them understand why.
- Questions on the effectiveness of flyers and Community meetings. Discussed knowing the audience and developing outreach methods that work in your community
- Example of phone calling systems used by schools typically more effective than mailing
- Marketing for different audiences – need multiple options

Need to get all agency buy-in on a comprehensive plan and then implement it

### Actions

- Create a list of agricultural contacts and partners to reach out to
- Identify data to be able to show ‘why’ action is needed – Tie it to what people care about
- Reach out to emergency responders in community. Make sure that they are aware of utility vulnerabilities and develop relationships well before emergencies.