

# Our Willamette Waters: Science in Service of Policy, Management and Restoration

November 12–13, 2024  
La Sells Stewart Center, Oregon State University, Corvallis, OR

Agenda at a Glance



<https://fwcs.oregonstate.edu/fwcs/our-willamette-2024>

# Our Willamette Waters 2024

Day 1—Tuesday November 13

| Time        | Topic   | Speaker                      |
|-------------|---|------------------------------|
| 8:00–9:00   | Registration, speaker presentation upload, poster installation  |                              |
| 9:00–9:05   | Welcome and Orientation   | Guillermo Giannico           |
| 9:05–9:20   | Land Acknowledgment   | Chance White Eyes            |
| 9:20–9:25   | Session Introduction  | David Hulse                  |
| 9:25–9:45   | Willamette Waters: where we've been, where we are now, where we're going  | David Hulse                  |
| 9:45–9:55   | Our Willamette Waters: overview of landscapes, river corridors, and overlapping water-related issues that affect people and ecosystems along the Willamette Basin river network | Rose Wallick                 |
| 9:55–10:35  | Meanders of the Willamette River Initiative   | Joe Moll, Kathleen Guillozet |
| 10:35–11:00 | Networking break  |                              |
| 11:00–11:05 | Session Introduction—People and Biota   | Stan Gregory                 |
| 11:05–11:25 | People and biota in the Willamette: some thoughts, recent findings, and conceptual frameworks   | Stan Gregory                 |
| 11:25–11:45 | Declining trends of native fishes amidst biological invasions in the Willamette River basin   | Brooke Penaluna              |
| 11:45–12:05 | Spring Chinook Salmon habitat and fish passage limitations in the Willamette River basin  | Toby Kock                    |
| 12:05–1:30  | Lunch   |                              |
| 1:30–1:35   | Session Introduction—People and Water Policy  | Adell Amos                   |
| 1:35–1:55   | Willamette Waters: people and water law and policy  | Adell Amos                   |
| 1:55–2:15   | The realities and science of managing heat in the Willamette River system—a balance or imbalance among various influences   | Stewart Rounds               |
| 2:15–2:35   | ODFW updates on Willamette Basin spring Chinook Salmon  | Kelly Reis                   |
| 2:35–3:00   | Networking break  |                              |
| 3:00–3:05   | Session Introduction—People and Wildfire  | Rebecca Flitcroft            |
| 3:05–3:25   | Wildfire: an important riverscape process with very human effects   | Rebecca Flitcroft            |
| 3:25–3:45   | Fire in moist forests of the Pacific Northwest: then and now  | Matt Reilly                  |
| 3:45–4:15   | The Good Fire: restoring cultural burning to the Willamette Valley and Pacific Northwest  | Cristina Eisenberg           |
| 4:15–4:35   | Reconstructing Traditional Water systems in the Willamette Valley   | David Lewis                  |
| 4:35–5:05   | Closing synthesis and discussion of what we have heard  | Lisa Gaines                  |
| 5:15–7:00   | Poster session and networking social;<br>"UPRIVER" movie in plenary room, 5:30–6:30   |                              |

# Our Willamette Waters 2024

Day 2—Wednesday, November 13

| Time        | Topic   |
|-------------|---|
| 8:00–9:00   | Registration  |
| 8:30–9:00   | Welcome to the day  |
| 9:00–10:00  | Roundtable/workshop sessions  |
| Option 1    | Floodplain science, policy, and restoration—Part 1  |
| Option 2    | Watershed Action Planning in 2025 for 25 years—Part 1                                       |
| Option 3    | Policy and public engagement—Part 1   |
| Option 4    | Bending the curve for our Willamette River native fishes                                    |
| 10:00–10:45 | Networking break  |
| 10:45–11:45 | Roundtable/workshop sessions  |
| Option 1    | Floodplain science, policy, and restoration—Part 2  |
| Option 2    | Watershed Action Planning in 2025 for 25 years—Part 2                                       |
| Option 3    | Policy and public engagement—Part 2   |
| Option 5    | Roundtable on Restoration in the North Santiam: priorities, success stories, and challenges |
| 11:45–1:00  | Lunch   |
| 1:00–2:00   | Closing wrap-up/panel in Plenary  |

## Roundtable/Workshop Sessions

### 1. Floodplain science, policy, and restoration

**Collaborators:** Tanya Shukla, Desirée Tullos

Floodplains are important geomorphological features that are connected to the channel through exchange of materials and energy. Pulses of floodplain inundation drive this exchange, influencing a host of geomorphic and ecological processes including floodplain evolution, ecological diversity, and reactive transformation of solutes. Human activities including intensive agriculture, damming, bank stabilization, and channelization have disconnected river channels and floodplains, disrupting floodplain function and the overall health of the floodplain ecosystem. Natural hazards such as wildfires and climate change can further alter these systems. Subsequently, paradigms of river restoration have shifted toward floodplain reconnection. This session invites contributions from researchers and practitioners engaged in studying the science, restoration, or policy issues concerning river floodplains. Floodplain studies integrating fieldwork, remote sensing, experiments, numerical modeling, restoration, and beyond are all welcome. The session will include presentations from researchers and practitioners engaged in studying the science, restoration, and policy issues concerning river floodplains in the Willamette Valley. Discussions about the role of floodplains and floodplain restoration in mitigating impacts of natural hazards like wildfires will follow the presentations.

## **2. Watershed Action Planning for 25 years in 2025**

**Convenors:** Roslyn Gray, PE, Portland Bureau of Environmental Services (BES); Susan Fricke, Eugene Water Electric Board (EWEB); Luke Johnson, Environmental Science Associates (ESA)

The City of Portland Bureau of Environmental Services (BES) recently completed a Watershed Restoration Retrospective for Johnson Creek, a tributary of the lower Willamette River in the urbanized landscape of Portland. This effort reflected on the last 25 years of investment in the watershed. Much further upstream, on the McKenzie River, Eugene Water & Electric Board (EWEB) and a broad partnership have been implementing the McKenzie Sub-basin Strategic Action Plan, which represents a unified vision for investments in watershed restoration efforts on the McKenzie through 2026. With an eye for the next 25 years, Roslyn Gray (BES), Susan Fricke (EWEB), and Luke Johnson (ESA) will lead a dialogue with this group of Willamette Basin practitioners, planners, and scientists to identify strategies and critical considerations for future watershed stewardship. The session will begin with a brief introduction that transitions to a focused deep-dive on watershed-management challenges, such as accountability, climate resilience, connecting policy to science, emerging contaminants of concern, equity and access, funding streams, groundwater recharge, houselessness, instream flow, wildfire resilience, and “light-touch” or adaptive management restoration actions.

## **3. Policy and public engagement**

**Convenors:** Molly Casperson, U.S. Army Corps of Engineers, University of Oregon Museum of Natural and Cultural History Research Division, Portland State University, Confederated Tribes of the Grand Ronde Community of Oregon, and Boise State University

In a workshop/roundtable format, professionals from various disciplines and organizations will discuss how technical information and associated policy for land and resource management is conveyed to local communities. Participants will explore what disconnects may exist between the creation of policy/management plans and the perceptions of local communities and stakeholders who may feel most affected by proposed actions/plans/policies. The participants will brainstorm how to define meaningful engagement and the tradeoffs of varied outreach approaches.

## **4. Bending the Curve for Our Willamette River Native Fishes**

**Convenors:** Brooke Penaluna, Stan Gregory, Kelly Biedenweg, and Dave Hulse

Over the past decade, abundances of native fishes have declined in the Willamette River, while nonnative fish distributions and abundances have increased, especially downriver. Contractions in distribution and/or declines in population abundance generally precede species extinctions, leaving managers with limited time to address these pressing biodiversity challenges. In this workshop, we will work in small groups to brainstorm and discuss socio-ecological strategies to help decision makers identify priorities to recover our native fishes and then come together as a larger group to synthesize ideas.

## **5. Roundtable on Restoration in the North Santiam: Priorities, Success Stories, and Challenges**

**Convenors:** Anne Mullan and Lindsay McClary, Roundtable presentation (with other agency or tribal members)

We will discuss the crucial role of the North Santiam River for the Upper Willamette River steelhead and Chinook Salmon populations listed as threatened under the Endangered Species Act. Habitat restoration is part of overall efforts to reduce harm, which will increase abundance, productivity, diversity, and spatial structure. This will include discussion of the following:

- Opportunities for improvements in habitat reaches below US Army Corps of Engineers Detroit and Big Cliff Dams
- The success and challenges for past and current restoration efforts
  - ◊ Ongoing funded restoration for extensive floodplain channels reconnection, insights from Confederated Tribes of the Grande Ronde projects
  - ◊ Large wood placement in rearing habitat for steelhead and Chinook Salmon, with consideration of whether 2020 fires caused damage
  - ◊ Future projects for changes in passage around infrastructure
- Monitoring for adult and juvenile life-history stages in reaches above and below habitat restoration