



In-person attendees, Spokane, WA 2024



Columbia River Basin Restoration Working Group

Virtual Meeting Summary
June 10, 2025



COLUMBIA RIVER BASIN RESTORATION WORKING GROUP

JUNE 2025 MEETING SUMMARY

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Columbia River Basin Restoration Working Group Virtual Meeting

June 10, 2025

ATTENDEES

- Adriane Borgias, WA Dept of Ecology
- Andrea Sumerau, Confederated Tribes of Siletz Indians
- Andrew Swanson, Oregon Association of Clean Water Agencies/Clackamas Water Environment Services
- Ashley Zanolli, EPA R10
- Bradley Blackwell, WA Dept of Ecology
- Brian Crego, Confederated Salish and Kootenai Tribes
- Brooke Stowell, Nez Perce Tribe
- Bryan DeDoncker, Clark County Public Health
- Bryson Finch, WA Dept of Ecology
- Cailin Sinclair, Oregon State University
- Caitlin Dols, Confederated Tribes of Grand Ronde
- Cari Cortez, The Freshwater Trust
- Carl Merkle, Confederated Tribes of the Umatilla Indian Reservation
- Caroline Keever, Upper Columbia United Tribes
- Casey Lewis, Western Montana Conservation Commission
- Catherine Corbett, Lower Columbia Estuary Partnership
- Catherine Gockel, EPA R10
- Chelsea Chambers, Merrick & Company
- Chris Hathaway, Lower Columbia Estuary Partnership
- Damon Roberts, WA Dept of Ecology
- Dan Kent, Salmon-Safe
- David Brooks, MT Trout Unlimited
- David Gruen, OR Dept of Environmental Quality
- Davis Washines/Yellowash, Yakama Nation
- Denise Hassinger, EPA R3
- Dennis Daw, Upper Snake River Tribes Foundation
- Devan Noblit, Confederated Tribes of the Umatilla Indian Reservation
- Dianne Barton, Columbia River Inter-Tribal Fish Commission
- Dorie Sutton, City of Vancouver, WA
- Elaine Placido, Lower Columbia Estuary Partnership
- Elena Nilsen, USGS
- Ellen Woods, OR Dept of Environmental Quality
- Emerson Christie, WA Dept of Health
- Emilie Henry, Western Montana Conservation Commission
- Eric Cutler, Mott MacDonald
- Erik Peterson, EPA R10
- George Trey, City of Spokane, WA
- Genny Hoyle, Kootenai Tribe of Idaho
- Graham Freeman, Idaho Governor's Office of Species Conservation
- Greg Anderson, EPA R8
- Heather King, Willamette Riverkeeper
- Heidi Fleury, Western Montana Conservation Commission
- Hilary Cosentino, The Freshwater Trust
- Jakub Bednarek, WA Dept of Ecology
- Janelle Groff, Montana Pesticide Stewardship Program
- Janet Knox, Yakama Nation Fisheries
- Jasmine Zimmer-Stucky, Lower Columbia Estuary Partnership
- Jenny Ammon, City of Keizer, OR
- Jerry White, Upper Columbia United Tribes
- Jessica Brandt, University of CT
- Jessica Keys, Office of U.S. Senator Merkley
- Jim Medlen, WA Dept of Ecology
- JoAnn Holloway, USGS
- Johanna Blake, USGS
- John Spencer, City of Nampa
- Jordan Tollefson, NorthWestern Energy
- Julie Carter, Columbia River Inter-Tribal Fish Commission
- Karen Ward, EPA Region 8
- Kathryn Rifenburg, OR Dept of Agriculture
- Kelly Hendrix, Western Montana Conservation Commission
- Kelsey Shaw Nakama, Tualatin Riverkeepers
- Ken Clark, Nez Perce Tribe
- Kevin Masterson, Stony Creek Consulting
- Kevin Scribner, Kooskooskie Fish LLC/Salmon-Safe
- Kregg Smith, OR Dept of Fish and Wildlife

- Krista Lammers, Western Montana Conservation Commission
- Kristen Jordan, Western Montana Conservation Commission
- Lara Christensen, Oak Lodge Water Services
- Laura Shira, Yakama Nation Fisheries
- Laurie Porter, Columbia River Inter-Tribal Fish Commission
- Lisa Kusnierz, EPA R10
- Margaret Drennan, WA Dept of Agriculture
- Mariah Durglo, Confederated Salish and Kootenai Tribes
- Mark Peterschmidt, WA Dept of Ecology
- Mary Rose Morigeau, Confederated Salish and Kootenai Tribes
- Matt Graves, Port of Vancouver, USA
- Melody Poland, EPA R10
- Michelle Fillion, USGS
- Michelle Wilcox, EPA R10
- Morgan Baker, WA Dept of Ecology
- Natalie Swan, Yakama Nation Fisheries
- Nathan Woods, WA Dept of Ecology
- Neil Crescenti, The Nature Conservancy
- Nick Peak, EPA R10
- Nikki Guillot, City of Vancouver, WA
- Patrick Moran, USGS
- Peter Brumm, EPA R8
- Peter Ismert, EPA R8
- Ray Balstad, Middle Fork Willamette Watershed Council/Upper Willamette Stewardship Network
- Rebecca Casey, City of Spokane
- Rebecca Perrin, EPA R8
- Robin Nimmer, Alta Science & Engineering
- Robin Parker, EPA R10
- Robyn Beers, unknown affiliation
- Roy Iwai, Multnomah County
- Sarah Dunn, USGS
- Sarah Whitney, Long Tom Watershed Council
- Sascha Stump, WA Dept of Ecology
- Scott Schlieff, EPA R10
- Sean Payne, USGS
- Sherrie Duncan, Yakama Nation Fisheries
- Stephanie Murphy, Western Montana Conservation Commission
- Steve Hinton, Tulalip Tribes Office of Treaty Rights and Government Affairs
- Susan Fricke, Eugene Water and Electric Board
- Sunrise O'Mahoney, Watershed Alliance of Southwest WA
- Tamara Knudson, Alta Science & Engineering
- Theresa Blaine, EPA R10
- Travis Schmidt, USGS
- Troy Baker, Confederated Tribes of the Umatilla Indian Reservation
- Whitney Fraser, Lodestone LLC
- Will Tiedemann, Idaho Conservation League
- William Hobbs, WA Dept of Ecology
- Yvette Joseph, Confederated Tribes of the Colville Indian Reservation

EXECUTIVE SUMMARY

Grantee Presentations:

- **Montana Trout Unlimited** reported finding concerning levels of dioxins, furans, and PCBs in Clark Fork River fish tissue, with higher contamination levels upstream near Blackfoot tributary
- **University of Connecticut** presented 40-year selenium exposure data from fish otoliths in Lake Koocanusa, showing bioaccumulation patterns linked to Canadian coal mining operations
- **Lower Columbia Estuary Partnership** updated on their \$4M school stormwater retrofit program, completing projects at multiple schools including successful community engagement at Rigler Elementary

Strategic Development:

- **Yakama Nation** presented draft implementation plan for basin-wide toxics monitoring program, building on existing fragmented efforts
- **EPA/USGS** unveiled draft Vision for a Columbia River Basin Monitoring Strategy with four key goals: sustain partnerships, prioritize pollutants, assess status/trends, and utilize new monitoring tools

Funding Program Status:

- **\$91M awarded** across 64 grants over past 5 years, including \$79M from Infrastructure Investment and Jobs Act
- **No new funding opportunities** expected unless significant budget increases occur

Partner Updates - Highlights:

- Washington State released new Priority Products Report identifying 9 products with hazardous chemicals (This [short legislative overview](#) that identifies the products and a [technical report](#) with more detailed explanations)
- The Lower Columbia Estuary Partnership completed its Comprehensive Conservation and Management Plan update earlier this year and it is currently under EPA review.
- Multiple pollution prevention initiatives underway including PFAS reduction toolkits and pesticide take-back programs
- Strong interest in continued collaboration, with 84% of participants wanting regular subgroup calls

Next Steps

- Toxics Monitoring Subgroup Workshop (June 12, 2025)
- Fall virtual meeting (October 30, 2025)
- Spring in-person meeting (May 2026)
- Continued focus on networking and cross-sector collaboration

Resources Shared during the Working Group meeting (does not constitute EPA endorsement):

- Tribal Pacific Program [policy document](#) and [technical document](#) for 2025 Tribal Pacific Lamprey Restoration Plan
- [EPA Safer Choice media toolkit](#) for communities to use for outreach on safer cleaning products
- OR ACWA's [PFAS & Phthalate reduction project](#)
- WMCC's [Rain garden social marketing toolkit](#) (septic system maintenance program toolkit coming soon!)
- [Social marketing toolkit](#) for onsite sewage systems, pet waste, etc.
- [Follow the Water, Connect the Drops OR Statewide Campaign Playbook](#)
- [Montana Waters Social Marketing Campaign](#)
- [International Stormwater BMP Database](#)
- [Social marketing resources and free quarterly forums](#)
- Working Group [Background and Previous Meeting Summaries](#)

WELCOME, AGENDA REVIEW, & INTRODUCTIONS

Robin Parker, EPA Region 10 Columbia River Basin Restoration Working Group Lead (Parker.Robin@epa.gov)

Robin welcomed the group and provided an agenda overview.

Robin introduced EPA's Columbia River Basin Team and announced the departures of Peter Murchie, Lauren McDaid, and Peter Ismert. On behalf of the group, Robin extended sincere gratitude to these individuals for their contributions to the Working Group. In addition, Greg Frey (The Council Oak) was not able to facilitate this meeting due to contract challenges, with Scott Schlieff and Melody Poland stepping in to provide assistance as well. Although the EPA team is smaller, the Working Group will continue to exist and carry out its work with EPA support.

GRANTEE PRESENTATIONS

Peter Brumm, EPA Region 8 Columbia River Basin Restoration Program Lead (Brumm.Peter@epa.gov) introduced the following speakers for the grantee presentations.

Dioxins, Furans, and PCBs, oh my!: Tracking toxins in Montana's Clark Fork River

David Brooks, Executive Director, Montana Trout Unlimited (david@montanatu.org)

David described his organization's two-year research effort from 2022-2024 to better understand toxins in the Clark Fork Basin and headwaters of the Columbia River. Montana Trout Unlimited partnered with the Confederated Salish and Kootenai Tribes; Clark Fork Coalition; Montana Department of Environmental Quality; Montana Department of Fish, Wildlife and Parks; and Missoula City-County Health Department to carry out this EPA-funded grant work.

Project Overview: The project aimed to sample water quality and fish tissue from various sites around the Clark Fork watershed with an emphasis on bracketing to see if toxins are entering the Clark Fork from tributaries. In addition to understanding the concentration and geographic scope of toxins in the river, this work is intended to support public outreach efforts, explain how toxins affect human health and the environment, inform future cleanup opportunities, and update Montana's fish consumption advisory.

Methodology: A technician from Fish, Wildlife and Parks deployed passive samplers near public access sites for 30 days to measure water quality. Non-profit volunteers checked on the location of the samplers, which were attached to PVC floats and weights to stay in place. Fish samples were gathered in coordination with Fish, Wildlife and Parks near existing sites used by the department to stun, count, and tag fish. Multiple samples were collected at each site, with fillet samples intended to represent fish consumption and whole-body samples to represent cultural and traditional uses, at the request of the Confederated Salish and Kootenai Tribes. Rainbow trout were targeted as a common sport and consumption fish in the Clark Fork. In the absence of these, mountain whitefish, which are commonly used for smoking and eating, were collected instead. In the lower sites, walleye was sampled.

Background and Results: In 2018, a fish tissue study revealed that all three categories of toxins were found in fish tissue from four sites in the Middle Clark Fork and one site in the Lower Clark Fork. This gained public attention in western Montana, and from it came interest in expanding the study area to cover the entire Clark Fork and include more fish samples, coinciding with the development of a new fish consumption advisory.

The results of the 2024 study showed higher levels of contaminants upriver near the Blackfoot tributary sampling sites. PCB levels were found at scale that poses risk to human health and that mirrored dioxin and furan levels, indicating that these three contaminants are likely entering surface water from the same source and accumulating in fish together. These results and concerns have been presented via media (radio) and public events. While the funded study ended in 2024, there are plans to do more public outreach and fund more passive sampling with a focus on high contamination

levels in the upper river. Future efforts include homing in on potential sources and working with partners to continue outreach and determine the next steps for cleanup.

Question: What are the plans for future cleanup and timing?

Response: The focus now is on potential new sources of contamination, which influences the question of cleanup. The Smurfit-Stone Superfund Site below Missoula may have been a source of mid-river toxins found in the 2018 study. The Upper River comprises a different unit of a current superfund site, and remediation work there may help to reduce contamination. Montana Department of Environmental Quality programs are also in different phases of streamside remediation for hot spots in the Upper Clark Fork. While Columbia River Basin Restoration Program grants cannot be used on superfund sites, we will continue to fund passive water sampling and see if levels go down through restoration.

Question: What were the findings from fish tissue samples (fillets and whole)?

Response: Fish tissue samples are currently undergoing QA/QC and being re-run at labs before that data is made available. So far, we see correlations with the water quality samples, and areas with high-level contamination should continue to correlate. We preferentially sampled the older end of juvenile trout that had not yet advanced to the migratory stage to better represent local populations. Based on this, agencies will extend the fish consumption advisory from the top to the bottom of Clark Fork.

Question: Have you seen or found greater traces of toxins from mining activity in Canada?

Response: We did not have any sites in the Kootenai River where those would come in. We have been involved with multiple agencies in tracking and weighing in on selenium and nitrogen from Elk River drainage that flows into Kootenai. Selenium exceeds the site-specific standard for Montana. An international commission is working on solutions for Canadian coal mining and the transboundary reservoir.

Question: Recognizing this is beyond the scope of your study, have you considered sediments as another metric/indicator throughout the watershed?

Response: There has been focus on groundwater sampling and soil analysis of sediment at the Smurfit-Stone Superfund Site. This question is hard to answer but worth investigation. Is sediment of more or equal concern when it comes to bioaccumulation? How well do these toxics bind to sediment and are they more bioavailable there versus when they are in the water?

Question: Are there any upcoming new mining risks, such as changes in regulations? The Montana legislature is advancing bills that loosen water quality standards (HB 664 and HB 587). How are those being tracked?

Response: We are tracking HB 664 and HB 587, but they apply to nutrient standards. I have not seen changes in legislation relevant to specific three toxins we are tracking. We are also tracking new mining permits and applications in the state. The three toxins are not highly associated with hard rock mining but with paper and cardboard producing mill sites. The high hits likely come from hydrocarbons from treating wood for construction, paper products, etc.

Additional commentary from the chat:

- The Kootenai Tribe has water chemistry and fish tissue data as it relates to BC mining activities.
- USGS has sediment and biota data for 13 Clark Fork sites - <https://www.usgs.gov/data/water-quality-bed-sediment-and-invertebrate-tissue-trace-element-concentrations-clark-fork>
- PCBs/D/Fs bind in sediment but do partition to saltwater and can be stirred up. Finer sediment will travel with erosion. PCBs would not be from wood treatment per se, but perhaps from electrical equipment at industries and possibly other paint sources (larger source in marine paint not likely here). There are PCBs from other urban uses such as sewage treatment and other outfalls.
 - Other sources of PCBs from past practices can be waste oils used for dust suppression on unpaved roads, construction sites, along rails, etc.

Reconstructing 40 years of selenium exposure from fish otoliths: Archival tissue applications for contaminant biomonitoring in Lake Koocanusa

Jessica Brandt, Assistant Professor, University of Connecticut (jess.brandt@uconn.edu)

Standing in for **Noëlie Molbert**, Postdoctoral Research Associate University of Connecticut (noelie.molbert@uconn.edu)

Project Background: This study originated from the same round of grants from 2022 and, in addition to EPA, involved the Montana Department of Fish, Wildlife and Parks; U.S. Geological Survey; University of California, Davis; and SLAC National Accelerator Laboratory, as partners.

The purpose was to inform long-term patterns in exposure and uptake from burbot populations in Lake Koocanusa, a transboundary reservoir that spans the border into British Columbia and Alberta, Canada. The reservoir receives wastes from surface coal mining operations that take place in the Kootenay Watershed. Coal mining activity is strongly associated with selenium, an essential trace element that can be toxic, especially to organisms that lay eggs. Over time, dissolved selenium concentrations in the Kootenay and Elk Rivers have grown higher than nearby reference waters that do not receive waters from mining activities. Dissolved selenium concentrations now exceed protective thresholds for aquatic birds and fish, including endangered bull trout as well as burbot and westslope cutthroat trout, species of concern.

Study Focus and Methods: This study focused on burbot, which has drastically decreased in Lake Koocanusa since the 1990s concurrently with increasing selenium concentrations. The study group aimed to understand the pattern of change over this period of time using fish tissue. However, soft tissue monitoring data only dates back to 2008, so fish otoliths were used to reconstruct a longer period of exposure that corresponds with mining activity. Otoliths are calcified structures in the inner ear cavity that grow from the core outward over a fish's lifetime. Otoliths are metabolically inert and have a protein structure that allows concentrations of elements like selenium to be retained over time. The study was able to use otolith samples from MT Fish, Wildlife and Parks archives to reconstruct a long-term population exposure pattern. Data was extracted from 38 samples taken between 1980 and 2020 to show a relative concentration over time.

Study Questions and Findings:

1. Are reservoir burbot exposed to selenium?

By examining their strontium isotope profiles, it was determined that five fish from our sample set moved into the reservoir after being born in a tributary system. Fish born into the reservoir had higher otolith core selenium levels than fish that migrated into the reservoir as juveniles, reflecting the assumed influence of maternally transferred selenium incorporated by the otolith. Over time, differences in concentrations even out between resident and migratory fish, but selenium counts in otoliths significantly distinguish between the two groups.

2. Is there a trend over time in burbot otolith selenium concentrations?

Across 10 years and accounting for all fish data, there is a typical bioaccumulation pattern of increasing selenium concentration based on deposits through maternal transfer, insect consumption (earlier lifestages), and fish consumption (later lifestages).

3. Does it mirror time-series of dissolved concentrations?

Across the lifecycle of burbot, there is an apparent relationship between flow-weighted selenium concentrations in the reservoir and concentrations in otoliths.

Publication Status: This study is currently in the draft publication stage and will hopefully be submitted soon for publication in 2025. The publication link and this presentation will be shared with the Working Group once published.

So Much Asphalt – A School Stormwater Retrofit Program Update

Chris Hathaway, Community Programs Director, Lower Columbia Estuary Partnership
(chathaway@estuarypartnership.org)

Organizational background: The Lower Columbia Estuary Partnership is a bistate nonprofit national estuary program with 30 staff focused on large and small-scale habitat restoration. The organization has worked on stormwater retrofit projects since the early 2000s, including small-scale projects for schools from 2005-2015. Due to cost and the high toll on staff actually carrying out labor, the Partnership refocused in 2017 with a new implementation for schools, boat ramps, and community sites. From 2018-2023, the group received funding from EPA to place Grattix boxes around the watershed. The group also received funding from the Washington State Department of Ecology to carry out a long-term stormwater treatment project in Ilwaco, Washington.

Current grant: These projects set the stage for a \$4M grant award from the EPA Columbia River Basin Restoration Program to engage in 13 stormwater retrofit projects at school facilities (2 parking lots and 11 schoolyards). The partnership secured \$1.4M in cost share funding from the City of Portland's Percent for Green grant; the Washington State Department of Ecology's Stormwater Financial Assistance Program; partnerships with local municipalities; and soil and water conservation districts.

Ongoing projects include:

- Washougal High School, which has the largest area of impervious surface within the Campen/Gibbons Creek watershed which flows into Steigerwald National Wildlife Refuge, the site of a previously completed very large restoration project
- Elementary school projects in the Portland area. There are more than five projects in various stages of concept development, design, and permitting. One project is just starting construction. Conversations with additional schools and partners for new projects are also taking place.
- Initial concept design work at Rooster Rock State Park to develop stormwater retrofit designs for the park's approximately 8-acres of parking lot that currently drains directly to the lower Columbia River without any water quality treatment. The project is in conjunction with an Estuary Partnership habitat restoration project in partnership with Oregon State Parks.

Highlights:

- **Evergreen High School design**

The Partnership received funding from the Washington State Department of Ecology matched with EPA Columbia River Basin Restoration Program funding to provide this project without any cost to the school district and city. The project goal is to treat 100% of stormwater on campus to qualify for a reduction in fees to the City of Vancouver (which sources all drinking water from an underground aquifer). The proposal includes retrofitting three out of four parking lots with trees, stormwater treatment areas, depaving, and traffic calming to improve water quality and pedestrian safety. The design process has just begun, and an initial Design Report submitted to Ecology. Design work will continue through 2025 and most of 2026.

- **Sunnyside Elementary School**

The Partnership received funding from the EPA and Clackamas County's Water Environment Service's RiverHealth Stewardship Program to design and build a stormwater retrofit project to treat stormwater from approximately 8,000 square feet of parking lot at Sunnyside Elementary School. The new stormwater facility was completed in spring 2025. Students were engaged in environmental education and helped plant more than 100 plants in and adjacent to the new facility.

- **Rigler Elementary School**

Rigler Elementary School is a Title 1 Spanish immersion school. Approximately 70% of Rigler's students are students of color. This project is a community effort with many partners that has been ongoing for many years and is the Estuary Partnership's first big stormwater project being constructed at a Portland Public School with EPA funding. The Partnership leveraged EPA funding to receive additional funding from the City of Portland (Percent for Green), the Rose

Foundation, and the East Multnomah Soil and Water Conservation District. The project will transform the schoolyard with tree planting and green infrastructure and manage stormwater in the schoolyard and parking lot before it joins city runoff and enters the Columbia Slough. Project milestones:

- In January 2024, EPA R10 Regional Administrator Casey Sixkiller visited the site to talk about the planned improvements.
- On June 7, 2025, over 100 people broke ground to remove asphalt with nonprofit Depave, which brought funding from different grants as well as trained staff, volunteers, food, tools, etc.
- Construction on improvements began shortly after and will continue into the fall.

This project will showcase the work that can be accomplished with partners and provide continued education to the community.

Future Plans:

- Rose City Park Elementary School – Partnering with Depave and City of Portland again to remove asphalt.
- Complete three construction projects in 2026 and take on additional new projects.
- Complete 20 projects over the course of 6 years instead of 12 as originally planned.

Comment: [Michelle Wilcox] As a reminder, volunteer hours and other support providing during planting events can count towards the funding match.

Question: Does Depave recycle asphalt?

Response: Depave handled every aspect of the process including disposal so that part is not clear, but asphalt from schools is challenging to recycle since it is composed of two layers with fabric in between.

Question: How do you get busy schools that are overloaded and short-staffed onboard for big projects?

Response: High school projects have been more straightforward because we have mainly worked with great project managers at the Facilities District level, but staff changes present challenges and uncertainty (e.g., losing the main project manager at Portland Public Schools). At schoolyard level, support from parents is important. Our project was timed well, since a landscape architect firm recently helped Portland Public Schools form a vision plan for 7-8 schools which included surveys, student interviews, etc. We were able to come in and help implement aspects of the vision plan, which made it easier to sell at the principal level.

Question: Has there been any interest in installing turf fields in place?

Response: Yes, especially among parents and sports groups, but that is outside the scope of our grant and project work. Grass fields are definitely in poor shape, but there is no logical funding source for it and the school district is struggling with limited resources.

PARTNER UPDATES AND OPEN FORUM

Columbia River Basin Monitoring Program Draft Implementation Plan

Laura Shira, Senior Environmental Engineer, Yakama Nation Fisheries (shil@yakamafish-nsn.gov)

Sherrie Duncan, Senior Fish Biologist / Restoration Ecologist, Yakama Nation Fisheries (duns@yakamafish-nsn.gov)

Overview: Laura provided an overview of the Yakama Nation's draft implementation plan for a basin-wide monitoring program, a living document that complements past work focused on the Columbia River mainstem as well as efforts with multiple entities. The document is coauthored by Janet Knox of Mott MacDonald. The first draft will be shared with the Toxics Monitoring Subgroup and tentatively with the Working Group in summer 2025.

The Yakama Nation has been working towards a roadmap for more cohesive basin-wide monitoring and an unbiased dataset that can be used to evaluate status and trends and make decisions to improve the state of the Columbia River. 100% of the mainstem and the majority of tributaries have monitored and documented toxic substances and fish advisories. In 2016, Yakama Nation produced an inventory mapping 120,000 hazardous waste sites in the Columbia River Basin within U.S. borders. Risks from contamination disproportionately affect tribes and children due to a higher rate of fish consumption and the Tribe views this contamination as violence and injustice to indigenous people.

Approach: The Tribe has been considering existing examples nationwide for plan implementation including high-level messaging focus, budget, funding sources, tribal involvement, lessons learned in implementation and evolution, governing structure, and how states and nations are involved. The plan needs a governance structure as well as funding, support, adaptive management, and outreach for basin-wide monitoring. It also needs to factor in existing efforts and monitoring work to provide large-scale interpretation, outreach, recommendations for data-gaps, and adaptive management for all entities.

Status: The Yakama Nation does not have the capacity to implement this approach basin-wide but is working on its existing mainstem monitoring program. This includes a pilot study in the Bonneville Pool that encompasses several monitoring points between the Bonneville and The Dalles dams over the last two years. Results from this study are forthcoming in 2025. Going forward, the Tribes hopes to monitor different media (e.g., fish, shellfish, sediment, water) as well as multiple contaminants over a five-year cycle, with each of the five segments of the mainstem visited every five years. Although the mainstem monitoring plan is ready to move forward, there is not enough funding to continue with the next implementation steps. The Tribe hopes to build on existing efforts and seeks feedback for improvement from partners with interest and capacity.

Comment: [Catherine Gockel] We look forward to engaging with you more on this, especially during the Columbia River Basin Restoration Program Toxics Monitoring Subgroup meeting on Thursday, June 12. We will dive into details about how to establish a toxics monitoring framework for the basin, current status and trends, fish consumption safety, and more.

Response: Thank you. Our work received funding from the EPA Columbia River Basin Restoration Program as well as the Columbia River Inter-Tribal Fish Commission.

Question: [Michelle Wilcox] Where have you found the most connection with partners on this type of work outside of this forum (e.g., other funding sources, local, state, tribal partners)? We often find ourselves working in silos, so it is refreshing to see these partnerships forming.

Response: The Yakama Nation has been the lead on the Bonneville Pool pilot study, and USGS has been technical lead on development and implementation of field work. The Columbia River Inter-Tribal Fish Commission, Washington State Department of Ecology, Oregon Department of Environmental Quality, and Washington Department of Fish & Wildlife have been instrumental in matching funds and providing technical contributions. Several parties in this Working Group that have also been helping such as the Upper Columbia United Tribes, Confederated Tribes of the Colville Indian Reservation, Spokane Tribe of Indians, Oregon Health Authority, and Washington State Department of Health. We could not have drafted the plan without the help of partners, but USGS has been particularly instrumental. We will continue to build and improve on drafts and hope to have a final product by the end of 2025.

Open Forum

Robin kicked off the open forum for participants to provide updates about their toxics work in the Basin.

Sascha Stump, Washington State Department of Ecology (sstu461@ecy.wa.gov)

Safer Products for Washington, a program that aims to reduce hazardous chemicals in consumer products, just released its Priority Products Report identifying nine new products with one or more hazardous priority classes. There is a [short](#)

[legislative overview](#) that identifies the products and a [technical report](#) with more detailed explanations as well as two webinars on June 17 that review the program and report. The next step is to research safer alternatives and recommend regulatory actions identified. A report with recommended regulatory actions will be available in late 2026.

Elaine Placido, Lower Columbia Estuary Partnership (eplacido@estuarypartnership.org)

The Partnership completed its Comprehensive Conservation and Management Plan update earlier this year and it is currently under EPA review. Primary focus areas include considering the effects of recurring extreme weather events, vulnerable communities, integrated habitat restoration areas, and actions and integrated measures that were informed by assessments of sea level rise. The draft 2025 update and 10-year implementation plan are available to review [online](#). Email Elaine with any questions.

Adriane Borgias, Washington State Department of Ecology (adriane.borgias@ecy.wa.gov)

The Washington State Department of Ecology received a Toxics Reduction Lead grant and Adriane is exploring a pesticide take-back program for upriver of Grand Coulee Dam in the upper basin of the Columbia River in Washington. Please contact Adriane if you have any interest, advice, or experience with this type of effort.

- Theresa Blaine referred Adriane to EPA colleagues in the Pesticide Program.

Laurie Porter, Columbia River Inter-Tribal Fish Commission (porl@critfc.org)

The Tribal Pacific Program has two updated documents associated with the 2025 Tribal Pacific Lamprey Restoration Plan: A [policy document](#) for use in meetings and a [technical document](#) for specific questions that contains tables with action plans, timelines, implementation plans. We just received the results of 497 lamprey samples submitted to USGS for mercury analysis and found the vast majority of results tested above thresholds for sensitive populations. Data was submitted to the Oregon Health Authority to review consumption advisory.

Kevin Masterson, Stony Creek Consulting (kmasterson@stonycreek.consulting)

In early 2025, the Oregon Association of Clean Water Agencies (Oregon ACWA) wrapped up a Columbia Basin Restoration grant project focused on reducing and assessing PFAS and Phthalates in wastewater. The pollution prevention resources and tools, as well as the PFAS monitoring report, are available here: <https://oracwa.org/pfas-and-phthalate-reduction-project/>

Dan Kent, Salmon-Safe (dan@salmonsafe.org)

Salmon-Safe is another Toxic Reduction Lead grant recipient working to develop network of place-based partners across the basin to assist in outreach and efforts to protect water quality. Current partners include the Walla Walla Basin Watershed Council, Palouse Conservation District, and The Nature Conservancy in Idaho. Salmon-Safe is also working with high impact development projects to encourage green infrastructure design, such as replacing the Hood River-White Salmon Interstate Bridge with a Salmon-Safe bridge that will manage runoff to prevent toxins like 6PPDQ and protect salmon migration. Salmon-Safe is seeking a Farm Outreach Consultant in Idaho.

- Robin Parker added that the Freshwater Trust has been working with irrigation suppliers to develop a network of growers that mostly operate on the Oregon-Idaho border.

EPA UPDATES

General EPA Updates

Catherine Gockel, EPA Region 10 Geographic Programs Section Manager (gockel.catherine@epa.gov)

- EPA does not yet have a new strategic plan for the agency, but this program supports the EPA Administrator's Pillar 1, Clean Air, Land, and Water for Every American; and Pillar 3, Permitting Reform, Cooperative Federalism, and Cross-Agency Partnership.

- The EPA team is working to get Columbia River funding out to grantees amid reduced staffing and other challenges and appreciates the Working Group partners that continue to carry out toxics reduction work in the Columbia River Basin.
- EPA will continue to co-convene the Toxics Monitoring Subgroup with USGS and support Toxics Reduction Lead and Tribal Lead grantees.
- The new Regional Administrators are Cyrus Western in Region 8 and Emma Pokon in Region 10. Emma Pokon has been briefed on the Columbia River Basin Restoration Program and met with two Toxics Reduction Lead grantees in Boise, Idaho, in May 2025. Many thanks to John Spencer from Nampa, Idaho, and to David Primozich from the Freshwater Trust for making these visits a success.
- EPA's NEPA program is reviewing the U.S. Army Corps of Engineers and Bureau of Reclamation's Notice of Intent to prepare a supplemental Environmental Impact Statement for the Columbia River system operations consistent with our subject matter expertise and NEPA/CAA Section 309(a) responsibilities.
- On December 13, 2024, the Federal Register published a notice including the Upper Columbia River site on the Superfund National Priorities List - <https://www.epa.gov/columbiariver/upper-columbia-river-superfund-site>

Grants Overview and Funding

Michelle Wilcox, EPA Region 10 Columbia River Basin Restoration Program (wilcox.michelle@epa.gov)

- Over the last five years, the Columbia River Basin Restoration Program has awarded \$91M across 64 grants. Last year's Science and Monitoring applications will all be awarded by mid-June. Please continue to send updates about your grant's results, success stories and public or volunteer events.
- Through the Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law, EPA received \$79M which has all been allocated to existing grants. This time-limited funding is set to end in 2026, with \$3M in FY25 funding going out soon. Recent awards were structured to receive incremental funding over the next 2-3 years; because of this, we don't expect to announce another funding opportunity over this period unless the program receives a significant funding increase.

Working Group Updates

Robin Parker, EPA Region 10 Columbia River Basin Restoration Working Group Lead (parker.robin@epa.gov)

- Following the original cycle of hosting Working Group meetings virtually in the fall and in-person in the spring going forward, the next virtual fall meeting will be on October 30, 2025, and the in-person meeting is planned for May 2026.
- The Working Group has three regular communities of practice groups for tribes, Toxics Reduction Lead grantees, and the Toxics Monitoring Subgroup. Working Group members have expressed interest in more networking opportunities and support for informal communities of practice. 84% of participants during the fall Working Group wanted regular subgroup calls and a high percentage also wanted ad-hoc partner calls on specific topic areas.
- While EPA is limited in its ability to host many meetings, today's meeting includes time for facilitated discussion and connection around specific topic areas. Today's meeting also includes an important update from the Toxics Monitoring Subgroup core team on a draft basin-wide monitoring strategy.

DRAFT COLUMBIA RIVER BASIN MONITORING STRATEGY OVERVIEW

Patrick Moran, USGS WA Water Science Center Aquatic Toxicologist (pwmoran@usgs.gov) and **Ashley Zanolli**, EPA Region 10 Senior Water Quality Specialist (zanolli.ashley@epa.gov)

In response to Working Group feedback and Clean Water Act Section 123, a core team of the Toxics Monitoring Subgroup drafted a vision for a comprehensive strategy to address toxic monitoring trends that answer questions about condition

of water quality, fish safety, and more. The draft strategy would build upon foundational work by the Yakama Nation and other partners to coordinate fragmented monitoring efforts.

The goals of the draft strategy are to:

1. Sustain and grow the **partnership** to monitor toxic pollution across the Basin.
2. **Identify and prioritize pollutants** in Columbia Basin waters by evaluating risk to humans and aquatic life.
3. Assess the **status and trends** and locations of priority pollutants in water, sediment, and/or fish.
4. Utilize **new tools and approaches** to evaluate legacy, emerging chemicals, and mixtures.

Core Team and Development Process: The Toxics Monitoring Subgroup core team, which functions like a steering committee in the development of the vision for this strategy, consists of Patrick Moran (USGS), Mark Jankowski (EPA), Lisa Kusnierz (EPA), Ashley Zanolli (EPA), and Sarah Dunn (USGS), as well as departing members Lauren McDaid (EPA), Amy Puls (USGS/PNAMP), and Jen Bayer (USGS/PNAMP) whose contributions are greatly appreciated. Mary Lou Soscia (retired EPA) was also thanked for her prior leadership of the program. The team hosted early listening sessions with 21 key partner organizations who expressed strong support for a voluntary high-level strategy.

The strategy will be developed through the Toxics Monitoring Subgroup, which meets quarterly and once a year for a workshop. The strategy spans multiple years and funding levels that multiple entities can cite and use as guidance. It is intended to be high-level and inclusive, and not tied to funding levels, mandates or requests. The goal is to understand where toxics are, what their sources are, and how to reduce them. We are still working on scoping questions such as “What we mean by ‘toxic’ and to whom (e.g., humans, aquatic receptors)?” and “What toxics do we start with?” Pollution prevention actions have also come up in feedback and we are considering how to incorporate this into the strategy.

Our proposed approach is risk-based prioritization that considers toxicity of the chemical of concern as well as exposure to humans and aquatic receptors. This “one health” approach has been adopted by the CDC, EPA, and WHO. These factors drive risk, which drive ranking for attention priority. It is also important to practice adaptive management and fill data gaps for unknown factors. Many different entities should be able to use this risk-based approach.

The proposed framework includes four components needed to accomplish the mission of monitoring contaminants in the basin: basin-wide coordinated monitoring, integration between projects, communicating status and trends, and partnership across the region. The vision for the strategy is a comprehensive, collaborative approach for monitoring toxic pollutants to assess trends and inform water quality protection and restoration activities across jurisdictions and sub-basins in the Columbia River Basin. It assumes there are common issues and approaches we can adopt across the basin. Feedback on this vision is welcome. In addition, a common Quality Assurance Framework ensures efficiencies in standardized QAPPs, protocols, coordination, more consistent data being generated. It accommodates different pollutants and organizes data collection methods and laboratory methods.




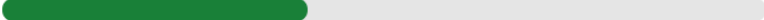
Which goals are most important? What is missing from the strategy? What other concerns are there?



Please rank the goals from most important to least important.

Ranking Poll 45 votes 45 participants

Share

1. Goal 1: Sustain and grow the partnership to monitor toxic pollution across the Basin
 2.73
2. Goal 2: Identify and prioritize pollutants in Columbia Basin waters by evaluating risk to humans and aquatic life.
 2.62
3. Goal 3: Assess the status and trends and locations of priority pollutants.
 2.24
4. Goal 4: Utilize new tools and approaches to evaluate legacy, emerging chemicals, and mixtures.
 1.58

Slido Feedback: What else should a monitoring plan consider:

- There needs to be something actionable in this plan. How can we as partners who don't necessarily do monitoring work use the data to make improvements to water quality in the basin?
- Strategies to reduce pollutants that various groups could implement.
- Translating the results into information that is accessible to the general public.
- Prevention methods and regulatory issues.

More details and discussion about the vision for the strategy will occur during the Toxics Monitoring Subgroup Workshop on June 12, 2025 and there will be future opportunities for engagement: <https://pnamp.org/event/crbrp-toxics-monitoring-subgroup-workshop-2/>.

NETWORKING TOPIC TABLES

Agriculture

Participants:

- Bradley Blackwell, WA Ecology
- Hilary Cosentino, Freshwater Trust
- Neil Crescenti, Nature Conservancy
- Margaret Drennan, WA Agriculture
- Lisa Kusnierz, EPA R10
- Nick Peak, EPA R10
- Rebecca Perrin, EPA R8 Ag Advisor
- Mark Peterschmidt, WA Ecology
- Jerry White, UCUT

Summary:

Many partners interested in addressing both legacy and current day pesticide issues. Discussion covered BMP adoption barriers, irrigation water management, uncertainty with EPA funding and tariffs, and the importance of building relationships and improving communication with farmer networks, conservation districts and NRCS. General interest in future information sharing opportunities like this but not a separate subgroup or standalone meeting.

Communication & Outreach

Participants:

- Adriane Borgias, WA Ecology
- Caitlin Dols, Confederated Tribes of Grand Ronde
- Sarah Dunn, USGS
- Emilie Henry, WMCC
- Kelly Hendrix, WMCC
- Caroline Keever, Upper Columbia United Tribes
- Stephanie Murphy, WMCC
- Catherine Gockel, EPA R10
- Erik Peterson, EPA R10

Summary:

Discussion covered the importance of knowing your audience and trusted messengers, as well as the challenges of measuring behavior change and communicating how outreach work leads to actual change. Participants talked through experiences with outreach tools and methods, including ESRI Storymaps, market based surveys, and tabling at outreach events, and shared the following social marketing toolkit examples:

- <https://poopsmart.org/>
- <https://montanawaters.com/>
- <https://westernmtwaters.com/our-work-and-projects/nonpoint-source-projects/toolkits/>
- <https://pnsma.org/>

Mining & Cleanups

Participants:

- Greg Anderson, EPA R8
- Johanna Blake, USGS
- Sherrie Duncan, Yakama Nation
- Whitney Fraser, Lodestone LLC
- JoAnn Holloway, USGS
- Peter Ismert, EPA R8
- Tamara Knudson, Alta Science & Engineering
- Patrick Moran, USGS
- Devan Noblit, Confederated Tribes of the Umatilla Indian Reservation
- Robin Nimmer, Alta Science & Engineering

Summary:

USGS mentioned two mining resources that might be helpful to cleanup work: 1) abandoned mine inventories, and 2) the mine waste reuse program. USGS is looking at past mine waste as a source for rare earth metals and has resources for aligned work. Further discussion covered monitoring strategy scope issues like sample media, mainstem vs. tributary sample sites, and an acknowledgment that mining issues are priority issue in some parts of the Basin but not in others.

Stormwater/Green Infrastructure

Participants:

- Peter Brumm, EPA R8
- Chelsea Chambers, Govt. Affairs at Merrick & Company
- Heidi Fleury, WMCC
- Chris Hathaway, Columbia Estuary Partnership

- Kristen Jordan, WMCC
- Krista Lammers, WMCC
- Casey Lewis, WMCC
- John Spencer, City of Nampa
- Scott Schlieff, EPA R10
- Michelle Wilcox, EPA R10

Summary:

The City of Nampa shared that they are testing different filter media to remove contaminants at the outlet of a constructed wetland and is seeking advice on what parameters to sample. EPA suggested consulting the International Stormwater BMP Database (<https://bmpdatabase.org/>) which has information on pollutant removal efficiencies for various stormwater BMPs.

The group then discussed how seeking other organizations with shared goals (e.g., municipalities with climate goals, other nonprofits, etc.) and cultivating personal interactions helps to identify willing partners and sites for green infrastructure projects. The conversation wrapped up thinking of ways to frame stormwater pollution in a way that makes it more personal to the targeted audience.

Pollution Prevention

Participants:

- Theresa Blaine, EPA R10
- Peter Brumm, EPA R8
- Brian Crego, Confederated Salish and Kootenai Tribes
- Bryan DeDoncker, Clark County (WA) Public Health
- Mariah Durglo, Confederated Salish and Kootenai Tribes
- Janelle Groff, Montana Pesticide Stewardship Program
- Nikki Guillot, City of Vancouver
- Kevin Masterson, Stony Creek Consulting
- Elena Nilsen, USGS
- Melody Poland, EPA R10
- Blaine Theresa, EPA R10
- Laurie Porter, Columbia River Inter-Tribal Fish Commission

Summary:

EPA hosts a quarterly Pollution Prevention Call and held a Pollution Prevention Roundtable about [PFAS](#) in the past year. Oregon ACWA recently completed the [PFAS and Phthalate Reduction Project](#) which includes an outreach toolkit and purchasing guides. Additionally, EPA has updated [Risk Management for PFAS under TSCA](#). Discussion then covered partnering with master gardener programs/extension services to reduce pesticide usage and the [Washington Integrated Pest Management Program](#) was cited as a robust resource.

Next participants held a conversation regarding audience-specific outreach material intended to produce voluntary change; often it's not about replacing the chemicals but asking people if they need to use chemicals in the first place. EPA has several public-facing resources in this arena, such as: [Environmentally Preferable Purchasing Program](#), [Design for the Environment Label](#), and [Social Media Safer Choice Toolkit](#).

Several risk communication challenges were discussed such as a general lack of trust in the science and how that undermines risk, or how people perceive routinely used chemicals as low or no risk. Education and voluntary market incentives can help, and the group discussed the benefits of involving public health educators in the development of P2 outreach materials given their unique perspective and framing the issues as urgent but achievable.

CLOSING DISCUSSION & ADJOURN

The group shared highlights and reflections from discussions that took place during the Networking Topic Tables.

- Lisa Kusnierz noted strong interest in continued coordination among agriculture participants, with suggestions for facilitating communication between sectors through email correspondence for questions and information sharing
- Michelle Wilcox expressed desire to pull specific expertise from different groups for cross-cutting **issues like community engagement and science monitoring**
- **Robin Parker** emphasized the importance of maintaining in-person meetings to facilitate peer learning
- **Shared Resources**
 - [EPA Puget Sound social marketing toolkit](https://poopsmart.org/) (poopsmart.org)
 - [EPA Safer Choice media toolkit for communities](#)
 - [PFAS & Phthalate reduction project resources](#)
 - [Western Montana Conservation Commission rain garden program toolkit](#)

Future Direction

- The Working Group will continue serving as a forum for connection, with EPA seeking to further promote the group's work, develop external partnerships, and demonstrate the impact of toxics reduction efforts across the basin. Participants were encouraged to continue sharing updates on events, media releases, and success stories for broader amplification.