Columbia River Basin Toxics Reduction Working Group Meeting

October 10, 2019
9:30am– 4:00pm

Columbia Gorge Discovery Center & Museum
5000 Discovery Drive
The Dalles, OR 97058

Meeting Attendees:

Patricia Atkins, Oregon Department of Environmental Quality
Leslie Bach, Northwest Power and Conservation Council (NPCC)
Brad Barnhart, National Council for Air and Stream Improvement
Dianne Barton, Columbia River Inter-Tribal Fish Commission
Ken Bailey, Orchard View Farms
Colin Brown, Washington Department of Ecology
Chris Budai, U.S. Army Corps of Engineers
Ken Clark, Nez Perce Tribe
Marie Cobb, Walla Walla Basin Watershed Council
Kathy Conn, U.S. Geological Survey
Catherine Corbett, Lower Columbia Estuary Partnership
Bryan DeDoncker, Clark County, WA
Collin Eagles-Smith, U.S. Geological Survey
Whitney Fraser, Lodestone Environmental Consulting
Emily Freilich, Sherman County Soil & Water Conservation District
Lauren Goldberg, Columbia Riverkeeper
Nikki Guillot, City of Vancouver, WA
Scott Hauser, Upper Snake River Tribes
Heather Hendrixson, Hood River Soil & Water Conservation District
Tom Hausmann, National Oceanic and Atmospheric Administration (NOAA) Fisheries
Garth Herring, U.S. Geological Survey
Carol Kriebs, Kootenai Tribe of Idaho
Darrin Kron, Montana Department of Environmental Quality
Rebecca Lawson, Washington Department of Ecology
John Marsh, Cowlitz Indian Tribe
Kevin Masterson, Oregon Department of Environmental Quality
Alec Maule, Independent Scientific Advisory Board, NPCC
Carman McKinney, Roy Farms
Jim Medlen, Washington Department of Ecology
Carl Merkle, Confederated Tribes of the Umatilla Indian Reservation
Alan Monek, U.S. Bureau of Reclamation
Karl Morgenstern, Eugene Water & Electric Board
Elena Nilsen, U.S. Geological Survey
Sage Park, Washington Department of Ecology
Karl Rains, Washington Department of Ecology
Kevin Scribner, Salmon Safe
Bob Schwarz, Oregon Department of Environmental Quality
Rian Salle, Washington Department of Ecology
Laura Shira, Yakama Nation
Elaine Snouwaert, Washington Department of Ecology
Dorothy Sperry, Port of Portland
Andrew Swanson, Oregon Association of Clean Water Agencies
Austin Walkins, Idaho Conservation League
Steve Waste, U.S. Geological Survey
James Willacker, U.S. Geological Survey

Tony Barber, EPA Region 10
Peter Brumm, EPA Region 8
Rob Elleman, EPA Region 10
Mike Fischer, EPA Region 8
David Gruen, EPA Region 10 [ORISE Fellow]
Lon Kissinger, EPA Region 10
Peter Murchie, EPA Region 10
Viccy Salazar, EPA Region 10
Ayn Schmit, EPA Region 8
Mary Lou Soscia, EPA Region 10
Michelle Wilcox, EPA Region 10
Ashley Zanolli, EPA Region 10

PowerPoint slides for the following presentations are available online:
https://www.epa.gov/columbiariver/columbia-river-toxics-reduction-working-group

1. **Revisiting the Priority Toxics List**
2. **Oregon and Washington State's Actions to Address PFAS**
3. **Reducing Pesticide Use: Integrated Pest Management at Roy Farms**
4. **Ceremonial Salmon Releases into Blocked Areas & Why Toxics Reduction Matters**
5. **Legacy Mining Impacts in Montana: Small-Scale Mine Clean Up Successes**
6. **Bradford Island Cleanup Discussion**

Updates from Attendees:
Meeting attendees introduced themselves and provided important updates on toxics-related work.

Kathy Conn, U.S. Geological Survey – I provide technical guidance related to toxics and water quality monitoring in the Upper Columbia River/Lake Roosevelt related to contamination from the Teck Trail smelter, located 10 miles north of the U.S/Canadian border, and other sources.

Dianne Barton, Columbia River Inter-Tribal Fish Commission – I chair the National Tribal Toxics Council. The Council is preparing comments on EPA's draft risk evaluation for the flame retardant, cyclic aliphatic bromide cluster (HBCD), released in June 2019.

Alec Maule, Independent Scientific Advisory Board, NPCC – The Independent Science Review Panel is finishing its review of the Phase 1 Report on the re-introduction of salmon above Chief Joseph and Grand Coulee Dams.

Dorothy Sperry, Port of Portland – The Port owns and operates Portland International Airport, Hillsboro Airport, Troutdale Airport, Four Marine Terminals on the Willamette and Columbia rivers, and several business parks. The Port is also responsible for working with the U.S. Army Corps of Engineers to keep the Columbia River's navigational channel open through dredging.

Ken Clark, Nez Perce Tribe – We are collaborating with the Idaho Department of Agriculture on pesticide monitoring and working to remediate a former mill site with legacy contamination.

Lauren Goldberg, Columbia Riverkeeper – Columbia Riverkeeper is focusing on some key toxics work efforts: the withdrawal of the human health criteria in Washington; and as part of a settlement agreement related to oil/grease pollution from large dams, the U.S. Army Corps of Engineers applied for National Pollutant Discharge Elimination System (NPDES) permits for eight dams on the mainstem Columbia and Snake Rivers.

Karl Morgenstern, Eugene Water & Electric Board – The utility works to protect the McKenzie River from contamination because it is the city's sole-source drinking water supply. The utility has worked with hazelnut growers to reduce their pesticide use by up to ~75% and is now working to help expand program throughout the Willamette River Basin.

Marie Cobb, Walla Walla Basin Watershed Council – The Watershed Council participates in the Pesticide Stewardship Partnerships Program and is interested in reducing PCBs in Mill Creek.

Andrew Swanson, Oregon Association of Clean Water Agencies – Municipal separate storm sewer system (MS4) permit holders in Clackamas County recently partnered with the U.S. Geological Survey to monitor for pesticides to comply with permit requirements. The study found the current-use insecticide bifenthrin in stream sediments and the presence of bifenthrin was correlated with a negative effect on aquatic invertebrate communities. In 2016, the results of the study were published in the Journal of Environmental Monitoring and Assessment.

Ayn Schmit, U.S. EPA Region 8 – I lead transboundary work to address selenium contamination from coal mining activities in British Columbia, Canada. Recent water quality monitoring has found elevated levels of selenium in water and fish in the Kootenai River.

Elena Nilsen, U.S. Geological Survey – In partnership with the Confederated Tribes of the Warm Springs Reservation, the U.S. Geological Survey (USGS) is working on the phase two of a study to conduct sediment and tissue analyses and evaluate contaminant burden to Pacific Lamprey. In the Columbia Slough near Portland, OR, USGS is monitoring PFAS concentrations. Recently, USGS released a journal article on contaminant concentrations in sediments, aquatic invertebrates, and fish in proximity to rail tracks used to transport coal in the Columbia Gorge.

Revisiting the Priority Toxics List

Presenter: Ashley Zanolli, EPA Region 10

Ashley provided an update on efforts by a sub-group of the Columbia River Toxics Reduction Working Group, co-led by Ashley and Jennifer Morace from USGS, to update the list of priority toxics developed by a team of scientists in 2007 to identify priority pollutants for the 2009 State of the River Report. An updated priority toxics list will help identify data gaps, support monitoring plans, inform local prevention or remediation work and outreach effort, and provide a "living" reference document for interested parties throughout the Basin. One of the presentation's key objectives was to receive individual feedback from working group participants on the proposed grouping/prioritization concepts the subgroup has developed. There will be another opportunity to provide feedback on draft documents in December 2019.

Oregon and Washington State's Efforts to Address PFAS

Presenters: Kevin Masterson, Oregon DEQ and Jim Medlen, Washington Ecology

Kevin and Jim provided an introduction to per- and polyfluoroalkyl substances (PFAS) and discussed what their respective states and other states are doing to monitor, reduce and regulate these contaminants of emerging concern. PFAS compounds are a class of ~5,000 chemicals that have been used since the 1940's and 50's in a wide range of products, including carpets, furniture, outdoor gear, clothing, cookware/food packaging, and firefighting foams for their polymerization, repellence, and surfactant properties. The chemicals affect the growth, learning, and behavior of infants and children, affect the immune system, and increase the risk of cancer, among other health impacts. Currently, much of the environmental focus has been on drinking water contamination, but surface water quality concerns (ecological impacts, fish consumption) will likely be getting more attention in the near future.

Reducing Pesticide Use: Integrated Pest Management at Roy Farms
Presenters: Carman McKinney, Roy Farms and Kevin Scribner, Salmon Safe
Operating for 112 years, Roy Farms is a progressive, family-owned farm that grows hops, blueberries, and apples in Moxee, WA in the Yakima Valley. In 2014, Roy Farms became the first Salmon-Safe certified hop farm in the state; Salmon Safe certification protects water quality and the health of farm employees by focusing on what runs off the land. Carman spoke about their holistic efforts to reduce pesticide use – the farm eliminated the use of glyphosate products in 2018. The farm applies integrated pest management principles such as cover crops to reduce weeds and attract beneficial organisms to control pests and leaf/soil analyses to determine the health of the crop and soil.

Ceremonial Salmon Releases into Blocked Areas & Why Toxics Reduction Matters
Presenter: Scott Hauser, Upper Snake River Tribes
Scott presented on the ceremonial releases of salmon above blocked areas by the Shoshone Paiute Tribes and the Burns Paiute Tribe in the upper portions of the Snake River Basin. The Shoshone Paiute Tribes conducted releases in 2015-16, and 2019; a lack of fish in 2017 and 2018 prevented ceremonial releases from occurring. The first ceremonial release of 199 adult Chinook salmon captured at Hells Canyon Dam marked the first time tribal members were able to fish in the Duck Valley Reservation on the border of Idaho and Nevada since 1928. The Burns Paiute Tribe has conducted ceremonial releases in the upper Malheur River watershed in 2016-2019 – it had been 98 years since adult salmon had swam in these streams. Scott also spoke about the multi-phased Fisheries Resource Management Plan that builds off the ceremonial releases and sets goals to develop sustainable and harvestable populations of Chinook salmon and steelhead above currently-blocked areas in the next 30-50 years. Videos of the ceremonial fish releases can be found on the Upper Snake River Tribes Foundation website.

Legacy Mining Impacts in Montana: Small-Scale Mine Cleanup Successes
Presenter: Darrin Kron, Montana Department of Environmental Quality
Darrin presented on legacy mining impacts in Montana's portion of the Columbia River Basin and successful remediation projects. Over 900 stream miles, just under a quarter of all assessed mileage, and two-thirds of the assessed areas of lakes are listed on the 303(d) list for impaired waterbodies due to metal contamination. Darrin spotlighted work being done in the headwaters of the Clark Fork River, including projects to address mine tailings adjacent to Silverbow Creek, downstream of Butte; the successful Milltown Dam removal and Stimson Bonner Mill projects located five miles upstream of Missoula; and the Upper Blackfoot Mining Complex restoration project on the Blackfoot River. Darrin also presented on mercury contamination in Flathead Lake.

Bradford Island Cleanup Discussion
Presenters: Laura Shira, Yakama Nation; Chris Budai, U.S. Army Corps of Engineers; Bob Schwarz, Oregon DEQ; and Rebecca Lawson, Washington Ecology
To set the stage for the discussion between the presenters on the next steps in the cleanup that followed, Laura Shira provided an introduction to Bradford Island, including an overview of the historic waste disposal on and near Bradford Island between the 1930s and 1980s related to the construction and operation of Bonneville Dam. Laura reviewed the timeline of remediation and monitoring actions that have been conducted since the environmental investigation began in

1997, and identified areas of potential concern in the upland and in-river operable units at the site. In 2013, Oregon and Washington health departments jointly issued a "do not eat" advisory for resident fish that extends approximately one mile above Bradford Island. In 2017, a feasibility study for the upland operable unit was completed; a draft feasibility study for the in-river unit began in the same year and is still under development. In 2019, the U.S. Army Corps of Engineers terminated their Voluntary Cleanup Program Letter Agreement with the Oregon Department of Environmental Quality, and the President's fiscal year 2020 budget proposal has no money allocated for Bradford Island.

Transition to Section 123 Working Group

Presenter: Mary Lou Soscia, EPA Region 10

EPA is working to convene the Columbia River Basin Restoration Act Working Group, as called for under Clean Water Act Section 123. EPA Regions 8 and 10 sent invitation letters to 44 entities to participate in the new voluntary group. It is hoped that all members of the existing Columbia River Toxics Reduction Working Group will continue to participate in the CWA Section 123 Working Group. EPA plans to hold the first meeting of the Columbia River Basin Restoration Working Group in Spring 2020 at a location to be determined.

Columbia River Toxics Reduction Working Group Meeting Attendees.
Photo taken by Peter Murchie, EPA Region 10.