



Willamette River Toxics Reduction Meeting Summary
January 31, 2018, 1pm – 4pm
Columbia River Inter-Tribal Fish Commission (CRITFC)

Attendees

Alex Gilbertson, Metro Willamette Falls Legacy Project
Alex Liverman, OR DEQ
Alison Clements
Amanda Shellenberger, Anchor QEA
Andrea Matzke, OR DEQ
Andrew Swanson, ACWA
Bob Sallinger, Portland Audubon
Brad Hermanson, Hart Crowser
Bruce Newton, Johnson Creek Watershed Council
Courtney Johnson, Nez Perce Tribe
Dianne Barton, CRITFC
Grace Weatherford, Anchor QEA
James McKenna, Governor Brown's Natural Resource Office
Jane Bacchieri, City of Portland BES
Jennifer Morace, USGS
Jeremy Buck, USFWS
Jessica Lundin, NOAA Science Center

Jim Cathcart, West Multnomah SCWD
Katie Holzer, City of Gresham
Keri Handaly, City of Gresham
Kevin Masterson, OR DEQ
Kim Hack, OR DEQ
Jennifer Morace, USGS
Jessica Lundin, NOAA Fisheries Science Center
Kevin Scribner, Salmon Safe
Linda Scheffler, City of Portland BES
Madi Novak, OR DEQ
Mary Lou Soscia, EPA R10
Meagan Flier, Confederated Tribes of the Grand Ronde
Neal Jacob, PGE
Roy Iwai, Multnomah County
Sharon Selvaggio, NW Center for Alternatives to Pesticides
Steve Mrazik, OR DEQ
Todd Trigsted, TT Strategic Media

Round Table –Steering Committee Members Updates on work pertinent to Willamette Toxics Reduction Partnership – All

- Mary Lou (EPA) discussed connections between toxics reduction work and fish and wildlife recovery efforts. On January, 10, 2018, the NW Power Planning Council approved the posting of a pilot story map of PAH data in the Columbia River Basin which includes the Willamette River. This map was 2 years in the making by states, feds, tribes and NGOs. The focus is on health and aquatic life impact with reference to human health impacts. Individual actions to reduce PAH are emphasized in this work. [NWPCC PAH Story Map](#)
- Dianne Barton (CRITFC) briefly discussed EPA actions in relation to TSCA reform. Currently, EPA is reviewing 10 chemicals for potential updates. Most sensitive populations to be protected as part of the risk assessment. Dianne is the chairperson of EPA's National Tribal Water Council, which is providing input to EPA in regards to water-related concerns that affect Indian and Alaska Native tribal members.
- Kevin Scribner (Salmon Safe) briefly mentioned that the City of Portland has been given a Salmon Safe designation. [Salmon Safe](#)
- Sharon Selvaggio ([Northwest Center for Alternatives to Pesticides](#)) briefly discussed NMFS's recent Biological Opinion released this past December per litigation by NCAP and others. The BiOp was for three pesticides-- chlorpyrifos, malathion, and diazinon – and its effects on all listed salmon, steelhead and other U.S. threatened and endangered marine and anadromous species. NMFS recommendation in the BiOp includes several (unique) mitigation measures to reduce jeopardy to salmonids. On February 16, NCAP is hosting a landscaper workshop in

Oregon City where the focus will be to reduce pesticides and promote ecologically sensitive techniques. For more information see: http://www.pesticide.org/healthy_landscape_workshop

- Kevin Masterson (DEQ) provided an update on DEQ's Toxics Reduction Strategy. DEQ plans to present a draft revised strategy to the Environmental Quality Commission in May to get input and support. External entities will have an opportunity to review the draft strategy before and after the EQC meeting, and the Lower Willamette Toxics Reduction Partnership steering committee will receive a link to the document. There may be opportunities to leverage actions in this statewide strategy in the Lower Willamette Watershed.
- Todd Trigsted (TT Strategic Media) is a videographer and public educator and has done work for EPA, MT DEQ and others. His particular interest is in visualizing technical information.

Clean Rivers Coalition Update – Roy Iwai and Keri Handaly

CRC was recently awarded a \$50K grant from the Meyer Memorial Trust to fund a strategic plan for this effort, which would include components, such as market research, focus pollutants, audience, statewide umbrella campaign vs. specific on the ground efforts. CRC is getting ready to post a RFP for this work. General goal is to create a social norm for toxics reduction and was initially started to meet public education efforts as part of MS4 permit requirements (has gone way beyond that now). Mary Lou mentioned public engagement work the City of Nampa, ID, is doing with Hispanic populations on stormwater.

Update on Willamette River Upriver Reach Sediment Characterization – Madi Novak, OR DEQ

- \$100K on-site assessment grant from EPA
- DEQ sampled sediment in nine locations (composite samples at each site) in November 2017 to evaluate possible sources of contamination to the Portland Harbor Superfund site.
 - 9 sampling locations + Sellwood Bridge (OR DEQ Orphan Funding): Johnson Creek, Kellogg Creek, Tryon Creek, Lake Oswego Outlet, Forest Creek, Clackamas River, Abernathy (deposition at the bend) confluences with Willamette; offshore of Lake Oswego Industrial Park; downstream of Oak Lodge WWTP.
- Sampling constituents include the Portland Harbor contaminants of concern (e.g. TOC, metals and total solids, mercury, diesel, PAHs, SVOCs, phenols, phthalates, OC pesticides, PBDEs, PCDD/Fs, and PCB congeners)
- City of Portland also collected samples for PCBs in select locations
- Sampling results have been delayed, but are expected in the next several weeks.
- DEQ will post sampling results to the Partnership's website when available:
<https://www.epa.gov/columbiariver/willamette-watershed-toxics-reduction-partnership>

Getting Input on an Alternative Format for our Toxics Reduction Partnership Report – Alex Liverman, OR DEQ

- Is a Story Map the right format for the right purpose?
- Agreement on audience, content, main messages
- Partner collaboration opportunities
- See presentation on Partnership's website: <https://www.epa.gov/columbiariver/willamette-watershed-toxics-reduction-partnership>

- Alex briefly summarized what we heard from the last meeting about the content and format of a report. There were some general concerns that a typical kind of written report wouldn't best serve the needs of this project (i.e. sit on the shelf and gather dust). Focus should be on action items, rather than a polished report on all the regulatory programs related to toxics reduction. Alex also briefly reviewed the goals and principles for this project as outlined in the Portland Harbor ROD. In consideration of the stated goals, along with input from the Steering Committee, DEQ and EPA would like to move forward with describing toxics reduction efforts and recommended actions using a story map format.
- DEQ showed various examples of story maps, including the PAH map that NWPPC recently put together. There are different features that could be utilized (tab format, scroll down, etc.). We may also need to develop supplemental materials to help support this partnership.
- Target audience: DEQ and EPA generally think that the target audience is the Steering Committee and their constituents. Secondary audience is the general public. There were several comments about the difficulty of meeting a broad audience.
- Story map mock up. Kim reviewed a very skeletal draft of the story map so far. Lots of blank spaces to fill in with the help of Steering Committee members! Group thought it was important for us to restate the purpose of this partnership at each committee meeting, since there may be new people.
- Discussion with steering committee members:
 - o Members generally liked the story map format.
 - o Members liked the story map w/ the raindrop demonstration (i.e. click on a point on the map and it would show you what stream stormwater would end up)
 - o Story map could inspire others
 - o Provide education links for teachers/curricula
 - o Including all these related efforts on one map would help reduce duplication
 - o How would we prioritize actions? Similar to the Columbia Ri Toxics Reduction Strategy effort and initiatives?
 - o Include aspirational actions—e.g. Salmon Safe neighborhoods
 - o Audience—can tailor/build the story map to be very broad and include links/maps that dig deeper into information
 - o What's our strategy for distributing the map? Primary audience first given current resources and then phase in other secondary audiences?
 - o The committee shouldn't focus on external communication to public. It's the job of jurisdictions, agencies, nonprofits, etc. to do that.
 - o Map should first focus on task at hand—i.e. reduce potential sources of contaminants from upstream of Portland Harbor Superfund site.
 - o Build off existing efforts of Portland Harbor follow up actions. For example, as part of the Record of Decision, there are plans to develop a database. Wait for that effort or get something in place now to centrally store data?
 - o Work on messaging and consider people's values—e.g. clean rivers for all of us

Sticky Note Group Exercise

- Committee members placed tabs where they thought story map content should focus. The top two focus areas were: (1) How do toxics get into the river? and (2) Regulatory and voluntary programs/actions to reduce toxics.
- Partner Collaboration Areas: Committee members provided comments on where they could partner on this effort and what kind of activities to include.
- See compilation of results on Partnership's website:
<https://www.epa.gov/columbiariver/willamette-watershed-toxics-reduction-partnership>

Toxics Reduction Source Identification – Pervious Pavement Pollutant Removal and Heavy Metal Sampling from Auto Tires - Katie Holzer, City of Gresham, Department of Environmental Services

See presentation on website: <https://www.epa.gov/columbiariver/willamette-watershed-toxics-reduction-partnership>

Tire Study:

- Katie provided an overview of some local data she has collected on tire runoff and water quality benefits of pervious pavement (full depth, as well as 3" overlay). She has a tech memo she put together as well.
- Tire runoff study looked at level of heavy metals in stormwater coming off new and used tires (tested both what runs off piles of used tires, as well as the stagnant water inside the tires). Purpose for looking at runoff from tires is that outdoor storage of used tires doesn't currently require a permit from DEQ until after there are >100 tires stored outdoors as a waste product.
- Metals coming off new tires were usually not at levels of concern, likely because they are typically stored vertically on racks so that water doesn't come into contact with the inside
- Found fairly high levels of metals coming off used tires, particularly zinc and lead – both are higher than the concentrations typically found in road runoff samples, suggesting tires may be a major source
- The "stagnant" water collected from inside used tires was higher than new tires, or even water running off piles of used tires. Could be due to exposure to metals inside tires (e.g. steel belting). Katie did collect some samples looking at water inside tires after 1 hour, 1 day, 1 week and 1 month, and found that metal concentrations were high immediately after coming into contact with rainwater, and didn't significantly increase after being exposed for longer periods of time
- Gresham is using this information to try to get businesses generating used tires to minimize the number they have in outdoor storage, or change how they are storing them – putting them under temporary or permanent cover, racking them, so they are stored vertically and don't get water inside, etc. There may be city fire code issues related to covering tires, since it may increase the chance of catching fire. Maybe provide tire storage racks for businesses? In addition, the city looked at whether there could be a centralized program to pick up used tires from businesses or elsewhere, but apparently there is not a good market for recycling used tires.

- Katie showed a video of Jennifer McIntire's work on exposing coho to tire chunks (they die). Jessica Lundin, NOAA, is very familiar with these studies and added that vulcanization chemicals found in tires are the likely culprits killing coho, rather than just the metals.

Pervious Pavement

- Pervious pavement study was done to assess performance of Kane Road, which was widened 9 years ago, and as part of that project had a section done in full depth pervious asphalt (with underdrain, since in poorly infiltrating soils) and a section that just had a 3" pervious asphalt overlay (most of this section drains to rain gardens on the side). Katie collected samples from a section of Kane near the treatment site that was used as a control.
- The concentrations of TSS, nutrients and metals from the pervious overlay and full depth pervious sections were all significantly lower than the control. This finding is consistent with the findings of other studies (e.g. Austin Texas) where even a pervious overlay on top of standard asphalt can significantly reduce TSS and pollutants associated with solids.
- These findings are useful, since pervious pavement has often been viewed as a useful tool for infiltrating water and reducing pollutant loads to streams through volume reduction, but with the low concentrations of some pollutants that even a pervious overlay is able to achieve (sometimes lower than some regional scale vegetated facilities the City has tested), this could be an approach that could help achieve water quality goals needed to protect aquatic life in our local streams.
- One con of pervious pavement was that it can be difficult to clean up spills because of its porosity.
- Katie said that pervious pavement, in particular, the 3" overlay, isn't as expensive as some may think, particularly in relationship to overall costs and maintenance and water quality benefits.

Set Date and Identify Topics for Next Meeting – All

- Anticipate meeting in April. DEQ and EPA will look at potential dates and get back to the committee.
- Potential topics:
 - Group round table
 - Continue work developing story map
 - Willamette Riverkeeper mussel survey
 - USGS MS4 study on pesticides in the Clackamas basin (Kurt Carpenter)
 - "Smart sprays" used in irrigation in Aurora
- Water permits—wastewater dischargers, MS4 stormwater program, Willamette Basin mercury TMDL
- phthalates—ubiquitous
- Salmon Safe certification for the City of Portland
- EPA programs and policies

Action Items:

- DEQ to post results of upriver sediment analysis to project website once ready
- Think about how you could contribute to material in the story map and contact us
- Mary Lou to send out date of next steering committee meeting
- Others??