Spokane River Regional Toxics Task Force

Facilitated by the William D. Ruckelshaus Center (Chris Page and Kara Whitman)
DRAFT Summary Notes | Wednesday October 21, 2015 | 9:00 a.m. to 12:30 p.m.
Liberty Lake Sewer and Water District | 22510 E. Mission Ave. Liberty Lake, WA

Attendees

*Voting Members and Alternatives (*Denotes Voting Members)*

Tom Agnew *, BiJay Adams – Liberty Lake Sewer and Water District
Dale Arnold*, Jeff Donovan, Rick Romero – City of Spokane
Galen Buterbaugh* – Lake Spokane Association
Adrienne Cronebaugh* – Kootenai Environmental Alliance
Doug Krapas* – Inland Empire Paper
Bud Leber* – Kaiser Aluminum
Mike LaScuola*, Sandy Phillips – Spokane Regional Health District
Don Keil* – City of Coeur d'Alene
Dave McBride*(*phone*) – Washington Department of Health
Dave Moss*, Ben Brattebo (*phone*), Mike Hermanson (*phone*) – Spokane County
Mike Petersen*, Amanda Parrish – Lands Council
Jerry White*– RiverKeeper

Advisors

Jim Bellatty, Adriane Borgias, Brandee Era-Miller (*phone*), Michael Friese (*phone*), Will Hobbs, Dale Norton (*phone*) – WA Dept. of Ecology (Ecology)
Brian Nickel – U.S. Environmental Protection Agency (EPA)

Public/Interested Parties

John Beacham – City of Post Falls
Lisa Dally-Wilson – Dally Environmental
Dave Dilks (*phone*) – LimnoTech
Art Jenkins (phone) –City of Spokane Valley
Greg Lahti – Washington Department of Transportation (DOT)
Eric Williams – Gallatin
Ken Windram – Hayden Area Regional Sewer Board

Intros, Agenda Review, Acceptance of Prior Meeting Summary

No changes were made to the agenda. Task Force members provided some brief announcements and topics for future discussion:

- Dale Arnold, the representative of the City of Spokane on the Task Force, will retire at the end of the year. Rick Romero and Elizabeth Schoedel will take Dale's place on the Task Force's Administrative & Contracting Entity (ACE) and the Task Force. Jeff Donovan will be the City's representative on the dissolved oxygen Total Maximum Daily Load (TMDL).
- Jerry White gave a brief explanation of the Riverkeeper lawsuit regarding the Hangman Creek TMDL: it is targeted at non-point source pollution. Jerry explained the RiverKeeper viewpoint in regards to Hangman Creek, and cited a 1978 article in the Spokane Chronicle, that included then Mayor-elect Ron Bear talking about the dismal condition of Hangman Creek.

- Tom Agnew cited inaccuracies in the Crosscut article that published in October 2015 (Part 1: http://crosscut.com/2015/10/dangerous-colors-and-the-poisoning-of-the-spokane-river Part 2: http://crosscut.com/2015/10/what-will-it-take-to-clean-up-a-poisoned-river/).
- Task Force members would like a summary of the Environmental Assessment Program (EAP) work on PCBs and groundwater. This summary is posted on the Task Force website at http://srrttf.org/?p=5355.
- CELP/Sierra Club lawsuit: Plaintiffs filed a motion for additional relief. Brian Nickel received an email from an attorney: defendants may not be able to reach an agreement on a joint motion, if so then they would file separate motions, and the court will decide how the case will proceed from there.

9/23/15 Task Force Meeting Summary. Edits: Action item page 4: urban water data is complete. 2nd action page 6: amend to state "Adriane Borgias contacted Ecology director-Maia Bellon, who will connect with the Tribe."

DECISION: the September 23, 2015 summary notes were accepted with the edits outlined above.

TTWG Report and Technical Topics:

Update on August 2015 Sampling

Bud Leber explained that the conventional parameter data have been received. PCB data from AXYS will be out within the next week. Dave Dilks explained that if they receive the PCB data by the end of October, then he can give a high-level summary at the November Task Force meeting.

Urban Waters Sediment Sampling Data

Brandee Era-Miller of Ecology's EAP program explained that Ecology's Urban Waters Program staff collected sediment samples in late August 2013. Pacific Rim Lab analyzed the samples for PCB Congeners (1668C) and PBDEs (1614). It was a small data set, with sediment samples from eight locations and groundwater seep samples from two locations. The data has been QA/QC'd and will be entered into Ecology's Environmental Information Management (EIM) database in late 2015. In EIM, It will be titled SRUW-Spokane. Conclusions from the data analysis:

- Sediment: Total PCBs detected were below the sediment cleanup objective of the Washington State Sediment Management Standards of 110 ug/Kg.
- Sediment: When normalized to organic carbon, there is a pattern of higher PCBs at the location furthest downstream location (PostTerm2).
- Groundwater Seeps: Concentrations of the most common/most often detected congeners (47, 99 and 209) were highest at the PostTerm2 site, and the patterns did not change significantly when normalized for organic carbon or for % fines.
- Groundwater Seeps: concluded that it would be useful to look at the congener patterns in this data set.
- Congeners 47, 99 and 209 were detected at significant levels in the Laboratory Method Blank, so they were censored as not detected ("U") in the environmental samples.

Q&A/Discussion

- **Q.** Why are the total aroclors double at Posterm 2? **A.** They are two completely different analytical methods. The matrix for sediment showed that they were very un-homogenous.
- **Q.** With sediment and water concentrations so low, where are the fish getting exposed? **A:** Bio-accumulation. There are known hotspots. Every system is different; the only way to understand this would be to model it with a food web, bioaccumulation model to know where they are exposed. These are point measurements that did not look at prey items. Need to consider trophic levels and prey items, along with sediment, and water to get an accurate model that reflects this bioaccumulation.

- **Q.** Recent data suggest that current fish tissues may have less bio-accumulated PCBs than older fish tissue samples studied. Is this a lagging indicator that there is a reduction being seen in fish tissue? **A.** That fish tissue data was from the Little Spokane in the 1990s. Yes the concentration has gone down since this study, and it may take awhile for the system to reach equilibrium.
- **C.** EAP has a strong data set from the 2012 study. Trends in fish are difficult to follow without robust data.
- **C.** Will Hobbs explained that Dave Serdar put together a food web model adapted from a Puget Sound model. Spokane River fish have a fairly simplified diet. First step is to review Dave Serdar's data and look for data gaps. Exchange between sediments and the food web. The model would allow for scenario analysis.
- **C.** All but one of the samples were taken in shallow water during low flow. This may not characterize the conditions in the bulk of the channel; this system is "sediment-deficient". Many locations have no accessible sediment to sample.
- **C.** Groundwater Seeps: after blank correction, there may be a signal coming from one of the seeps in DAM GW-13. The samples are 3X above the sampling system noise, there is a good chance there is a signal there. Ted Hamlin and Spokane County sampled a well at Spokane Community College, indicative of the groundwater seeps. The samples are at AXYS. The County and Ecology will be sampling two more times at each location (sampling groundwater wells at Waikiki and T.J. Meenach Bridge).

ACTION ITEM: Ruckelshaus Center to add a discussion of food web modeling to an upcoming Technical Track Work Group (TTWG) Meeting. (COMPLETE)

Aquifer: Water Quality, Modeling, Terminology, How to Characterize? Gary Stevens (IDEQ)
The group discussed that terms and technical understandings and nuances may be slightly different between the river/surface water and groundwater. Gary Stevens explained that he did a geochemical study that used tools that may provide better understanding of the interchange. The data was published in 2013. Rob Lindsay said he could explain a few basics of aquifer river interaction to the group. The entire Idaho portion of the Spokane River is a losing reach (water from the river to the aquifer). Half of the river recharge from the aquifer happens between Post Falls and Barker Road. Rob stressed that the aquifer is a source of water to the river, PCBs could be in low concentrations; however high volumes at low concentration can be significant.

ACTION ITEM: Gary Stevens and Rob Lindsay to provide a presentation: big picture introductory overview of the interchange between the aquifer and the river at the November Task Force meeting. (COMPLETE)

SWAT Team Reports:
EPA Hatchery Draft Permit: Brian Nickel explained that EPA is working on a new general permit that will cover tribal and federal hatcheries. The existing permit is available online (expired 2014; administratively extended). The Draft Hatchery permit will be out for public comment in November 2015 (tribal meeting on Nov. 9th).

ACTION ITEM: Ruckelshaus to post existing permit federal general hatchery permit to the Task Force website. (COMPLETE, posted here http://srrttf.org/?page_id=1114)

***Hydroseed*:** Based on data collected in this study, it appears this source is significantly small. Ecology, the City of Spokane, and the Washington Department of Transportation (WDOT) are also looking at hydroseed. Once completed, these data can be added to the Task Force data set to substantiate the overall number to calculate the total PCBs applied over a course of a year, then what % of that enters the water.
ACTION ITEM: All hydroseed data to be sent to Doug Krapas as it comes in.

Stormwater Sampling Report: Will Hobbs discussed his work to look at all the stormwater data that the City of Spokane has accumulated since 2012. Will looked at the comparability of the data and whether there is relevant

mass fill from stormwater and how these concentrations have changed over time. The sampling methods were different: early Ecology work used grab samples and later work used composite samples – the two types are not directly comparable. The concentrations have not statistically changed. However, the runoff/precipitation relationships are complicated in the City and the City is working on a model to understand this relationship better (Cochran Basin). This model is to be complete in summer of 2016.

Q&A/Discussion

- **Q.** Do you (Will) have a sense at where things stand with concentrations of PCBs in the City's stormwater load? **A.** It is closer to Lynn Schmidt's estimate than the original estimate, but a bit higher.
- EAP Memo: PCBs in groundwater. Adriane Borgias explained EAP was asked to look at what is out there, identify wells, cleanup sites, PCB identified priority sites etc. The memo posted with the meeting announcement gives a summary of this work.

ACTION ITEM: Data from this (Martha Maggi) study to be dovetailed with a discussions of future groundwater sampling. (COMPLETE)

Geographic Scope of the Task Force

Adriane provided the group with a map of the water resource inventory areas (WRIAs, similar to HUC codes) in the Spokane River Basin. The group discussed the geographic scope of the Task Force's work and questioned the involvement of other parties. What other parties, and at what scale, should be included in the Task Force?

Hangman/Latah Creek may be a useful addition as there are a number of waste water treatment plants with outfalls located on this creek that feeds the Spokane River. It was suggested that the boundaries may be driven by more than technical or sampling boundaries. The data may lead the group to a different geographic scope, but for the time being the Task Force plate is pretty full. Other things to think about:

- The Task Force already has a snapshot of what is going on in the upper 50% of the Spokane River Watershed (very low concentration) at the outfall of The Coeur d'Alene Lake outlet.
- Latah Creek (implementation side, temperature and turbidity). Contact Elaine Snouwaert of Ecology for a presentation? Elaine is the Ecology TMDL lead for the Hangman/Latah Creek and the Little Spokane River.
- Depending on what aquifer data shows, the Task Force may need to get Kootenai County on board.
- Little Spokane River Watershed is data gap that needs to be addressed. Ecology has some data.

Will Hobbs: Atmospheric Deposition of Toxics Review and Scoping Study

Will Hobbs gave a presentation on the EAP desk study on Atmospheric Deposition of Toxics (to water bodies).

The study objectives were:

1) Review/assess the state of the science for atmospheric deposition of toxics in Washington, and
2) Outline the necessary scope to quantify atmospheric deposition at local, regional, and statewide scales.

Will explained there has not been much work done across the nation regarding atmospheric deposition of PCBs. There are a handful of studies in Washington, however there is a high uncertainty in these studies. The study concluded that there is value in quantifying the atmospheric contribution of toxics; however, Spokane likely only has small, indirect inputs via atmospheric deposition of toxics to the river. At a regional scale, direct atmospheric deposition of toxics has a bigger impact on Lakes, while rivers are more impacted by indirect inputs, which can be highly variable. Quantifying indirect inputs from atmospheric deposition would require a complicated fate-and-transport model. Atmospheric fluxes are comparable to stormwater fluxes.

Q&A/Discussion

- **Q.** What about transportation of dust from outside the area? **A.** Anything from outside the region would be considered dry deposition. The EAP memo does not deal with this, as there is no data on dry deposition.

Proposed EAP Study: Measuring Bulk Deposition of PCBs in Spokane

EAP has proposed a sampling plan to measure bulk (wet and dry) deposition of PCBs in the Spokane River Watershed and estimate the percent input of atmospherically-deposited PCBs to the Cochrane basin. The study will be similar to studies completed in King County and Puget Sound. They will conduct one year of monitoring covering three different seasons at two urban sites within of Ecology's air monitoring network (Monroe Street and Augusta Ave) and one background site (Cheney – Turnbull NWR). The samples will be analyzed for PCB congeners. The draft Quality Assurance Project Plan (QAPP) is under review, and the monitoring is slated to start in April of 2016. Brandee Era-Miller would like input from the Task Force.

Q&A/Discussion

- **C.** May be good to do wet weather sampling in the river concurrent with air deposition sampling.
- **Q.** What about particulate matter? **A.** Could do a high-volume method to get enough mass for the filters. **C.** Could correlate PCB concentrations with particulate matter data already being collected. This could be an Indicator of atmospheric PCB deposition.
- **Q.** How does the dry deposition get down to the sampler? **A.** Rinsed off with clean water from the lab, also scrub the inside of the sampler (at end of deployment period).
- **Q.** What is the incremental cost of adding additional stations to the monitoring? (Broadway elementary, Liberty Lake station) **A.** the Task Force could look at funding the additional sites.
- **C.** An Ecology 2009-2011 report may have data points from the Turnbull monitoring site.

ACTION ITEM: Brandee to send the incremental cost for adding in additional monitoring sites to the Task Force. (COMPLETE)

Comprehensive Plan: Update on Scope and Timeline

Dave Dilks briefly discussed changes to the comprehensive plan scope and timeline and asked the group about the feasibility of the timeline as it stands. Is July early/late enough for a workshop to consider what best management practice (BMP) options to include in the plan? Dave also removed mention of "comply with EPA" from the document to make the language align with the Task Force Memorandum of Agreement. He explained that the budget has not changed, but workshop facilitation would add some additional costs. Also, the inclusion of suggested information and public outreach component would require assistance from a public information specialist. Other items that the group discussed:

- Responsible parties for BMP implementation
- Removed "comply with EPA" letter to the judge
- Start date for work: first of year may not provide adequate time. Propose starting work in December.
- Adaptive management needs to be directly addressed in the plan.

ACTION ITEM: ACE to pull together the contract language for an amended scope. (COMPLETE)

Events & Outreach, Funding

- Kootenai Environmental Alliance: Held an event at Lake City High School. 99% of participants were not aware of the pollution. Will hold another similar event at the Coeur d'Alene High School.

- Funding Work Group: met on October 1st, 2015. The group would like to have the Task Force endorse the Lands Council grant proposal for the EPA Urban Waters Small grants. Amanda Parrish explained that with the funding, the Lands Council would do door-to-door outreach, instruct high school students, and work with inmates. The same work is being done in other basins. The work would focus on Immigrant and homeless communities. Part of the project funding is already covered by other grants
- Spokane River Stewardship Partners (SRSP) membership contribution request. Eight discharger members. Process usually generates $1.4 million that provides funding for the Task Force.
- Budget: $300,000 in the bank at this point, another $310,000 in the next funding cycle from State budget, plus the SRSP contributions.
- The next Task Force meeting will occur November 18th.

ACTION ITEM: A Letter of support for the Lands Council grant proposal to be completed by November11th for decision at the November 18th Task Force meeting. Mike LaScuola to draft a letter of support, with the help of Amanda Parrish, by November 4th. The Task Force Education and Outreach work group will provide feedback prior to the November 11th. (COMPLETE)

No Public Comment

The next SRRTTF meeting is Wednesday, November 18, 2015 at the Spokane County Water Resource Center.
The next Technical Track Work Group meeting is November 4, 2015 at the Washington Department of Ecology.