

Spokane River Regional Toxics Task Force

Wednesday September 27, 2017 | 9:00 a.m. – 12:30 p.m.

Spokane County Water Resource Center | 1004 N. Freya Street, Spokane WA

Facilitated by the William D. Ruckelshaus Center (Chris Page and Kara Whitman)

Meeting Documents: <http://srrttf.org/?p=8369>

Attendees:

Voting Members and Alternatives (*Denotes Voting Members)

Tom Agnew* –Liberty Lake Sewer and Water District

Mike Anderson*, Don Keil –City of Coeur d’Alene

Vicki Barthels* –Spokane Regional Health District

Sharon Bosley* (phone), Lisa Manning, Mike Zagar –Kootenai Environmental Alliance

Chris Donley* –WA Department of Fish and Wildlife

Bud Leber* –Kaiser Aluminum

Rob Lindsay*, Mike Hermanson –Spokane County

Cadie Olsen*, Jeff Donovan, Mike Coster –City of Spokane

Mike Petersen* –Lake Spokane Association

David Newton* –Inland Empire Paper

Advisors

Karin Baldwin, Jim Ross, Jeremy Schmidt –Ecology

Lucy Edmondson (phone), Brian Nickel (phone) –Environmental Protection Agency

Dan Redline –Idaho Department of Environmental Quality

Public/Interested Parties

Kevin Booth –Avista

Dave Dilks (phone) –Limnotech

Sarah Hubbard Gray –Spokane River Stewardship Partnership

Introductions and Agenda Review:

After a round of introductions, the Task Force opted not to change the agenda

August 23, 2017 Meeting Summary Review:

- Add “Facilitated by the William D. Ruckelshaus Center (Chris Page and Kara Whitman)” to header.
- Technical Track Work Group (TTWG) 9/6/17 Notes, Page 5: Brian N. looked at the *arithmetic* mean of existing PCB data for the Spokane River (not the geometric mean as currently stated on the notes).

DECISION: Task Force accepted the 8/23/17 meeting notes, with one minor edit noted.

ACTION ITEM: Kara Whitman to post the August 23, 2017 final notes to the Task Force website. (COMPLETE)

Administrative & Contracting Entity (ACE) Commitment Report:

Bud gave a brief update on the ACE financial commitments and uncommitted funds. As of August 31, 2017, the Task Force has \$162,642 committed funds and \$46,489 uncommitted funds.

Data Management Pilot Project Update:

The pilot project contractor, CDM Smith (CDM) still needs three data files from LimnoTech; this will require extra funding for LimnoTech to work with CDM to pull the data together and get it into the pilot database. This information includes location and chain of custody files for the 2014-2015-2016 Task Force river sampling. Dave Dilks noted some unused LimnoTech scope that can be authorized. ACE needs a decision from the Task Force to approve using this funding for Dave to work with CDM.

Bud said further analytical data from AXYS is needed, which will also require more funding. The Task Force needs to cover the cost for AXYS to work with CDM to generate the proper files for the database. The cost will not exceed \$10,000, assuming Electronic Data Deliverables (EDDs) cost less than 10% of the sample runs.

DECISION: SRRTTF authorized ACE to pay up to \$5,000 to LimnoTech, and up to \$10,000 to AXYS, for this work.

Presentation: LimnoTech Groundwater Fingerprinting Memo (Dave Dilks)

Dave requested Task Force members provide comments on the draft Groundwater Fingerprinting Memo by the October 4th, 2017 TTWG meeting. Using only data collected using Method 1668, LimnoTech compiled and assessed all relevant groundwater PCB data, and compared homolog patterns from wells near suspected groundwater sources to homolog patterns observed in the PCB load entering the River from groundwater. The study identified an apparent correlation between patterns for three wells and estimated loads to the River. Wells upgradient of Kaiser match the Barker to Mirabeau load; Kaiser wells match Mirabeau to Trent and Barker to Trent loads; and wells on the GE site match the Trent to Greene load. This is not a definitive conclusion of contribution, but should be considered evidence of contribution.

Q&A/COMMENTS (Q=question, A=answer, C=comment)

- **Q.** The conclusion for the Mirabeau to Barker reach is based on just one high data point, and the conclusion changes if that data point is removed. Does it make sense to collect more data? **A.** This merits further scrutiny. Jeremy Schmidt suggested using Well MW5 rather than MW5s for Barker to Mirabeau.
- **Q.** Why was the Greene to Spokane reach not looked at? **A.** They only had high concentrations in three well areas. They do not know to what extent there is a connection to groundwater in the other reaches, and there were no other wells with a concentration to do the analysis with.
- **Q.** Is it worth the cost to analyze beyond correlation? **A.** Yes, if we identify a site that needs remediation under the Model Toxics Control Plan (MTCA). Kaiser and GE sites have cleanup underway under MTCA; however, this work could help assess if the GE cleanup is meeting the MTCA standard. Ecology's Toxics Control Program (TCP) does not have information upgradient of Kaiser (the industrial park area, where no specific responsible parties have been identified), so this work will assist TCP. The upgradient area has a low-concentration, high-area PCB plume. To go further, the Task Force needs to find a source in this area that exceeds PCB Maximum Contaminant Levels (MCL) before TCP can enter someone's property.
- **Q.** What is the MCL level at which Ecology could engage an additional potentially responsible party (PRP)? **A.** At a concentration above the groundwater criterial level, essentially the drinking water standard (it does not have to be a MTCA level to trigger a response).
- **C.** Groundwater is the largest load to the River. If the Task Force can do something to reduce this load, we need to do it. If going on a hunt for the source will help get there, then we should pursue it.

PCB Monitoring: Overall Approach for Work by SRRTTF, Ecology, & Other Entities

Chris Page summarized the process leading up to the Budget Summit to allocate the \$310,000 the Washington state Legislature allocated (the Summit would also consider funds from other sources). The Spokane River Stewardship Partnership (SRSP) met and agreed, in principle, to match the State funding again (recognizing that each entity has an approval process they need to follow). NOTE: some SRRTTF members contribute in-kind resources, some contribute funding; Task Force members are encouraged to consider their contributions.

Budget Summit – Goal: a list of projects in priority order, with a budget and timeline:

Chris recapped conversations that led to a TTWG survey to rank proposed projects for consideration by the full Task Force. Proposed projects included an estimated cost (some with a range of costs). See "*Activities for*

SRRTTF Funding consideration_prioritized by TTWG” (at <http://srrttf.org/?p=8369>) for full descriptions of each discussed sampling option and control action.

Process Questions:

- **Q.** If we choose one or another monitoring option, does this impact Control Actions? **A.** No, each simply addresses the need for a five-year implementation assessment.
- **Q.** Why are we monitoring and what are we monitoring? **A.** Two parts: Assess major sources annually; and, after five years, gauge how effective implementation has been so far.
- **C.** This is a ranking of project priorities, but each specific project will come before the SRRTTF again with specifics (scope, budget, quality assurance project plan if needed, etc.) for a final decision.

Monitoring to fulfill Comp Plan Element 6.1 (“Implementation Effectiveness Assessment”), which states “In-river concentrations will be assessed via review of long-term river monitoring data to be collected by the Task Force and/or Ecology...The above assessment [review of data] will be conducted five years after the issuance of this Comprehensive Plan.”

Discussion on Monitoring (for Baseline Assessment)

- **C.** A change in PCB levels in the River may not appear until next-level wastewater treatment is in place, but collecting information now can show the benefits of that treatment (over next five years).
- **C.** We have not yet characterized this complex nonlinear physical and biological system. So thus far, “We are not doing science, we are doing what engineers do – capturing pieces in time with grab samples.”
- **Q.** What are the Priorities for monitoring, beyond the Implementation Effectiveness Assessment?
 - Gain a better understanding of the River system, particularly in certain parts of River.
 - Ecology: annual central tendency study (to occur at two sites) – can coordinate with Task Force.
- **C.** Over a seven-day period at one location, a wide range of results can emerge. When we look to demonstrate improvement, we need to focus on the sampling strategy. Ideally, we should collect more samples over one day, e.g. collect 4-5 samples in a day. This would lower uncertainty around a value.
- **C.** Dave Dilks recommends the partial synoptic sampling option, with a few tweaks to get more samples as part of each sampling event. The more data points, the more confidence in the baseline assessment.
- **C.** EPA is less interested in figuring out the baseline, and more interested in monitoring to improve understanding of what is entering the river and where, e.g. between Greene Street and the Spokane Gage (this looks like mostly lighter homologs, different than other places).

DECISION: The Task Force chose the “Partial Synoptic Sampling (high-frequency)” general approach. The work will be framed as baseline data collection, with further discussion of location, timing, and number of samples.

Menu of Control Actions for Consideration:

Sarah Hubbard Gray explained that as the SRSP and TTWG compiled potential control actions for funding consideration, they focused on both identifying potentially contributing sources and reducing known sources of PCBs to the River. Multiple control actions could potentially identify and/or reduce contributing sources.

The following are the control actions in the order ranked by the TTWG survey:

- a) Analyze existing data to identify potential relationships between homologs/congeners in the water column and homologs/congeners in fish tissue at Planters Ferry Park.*
- b) Study groundwater upgradient of Kaiser at Industrial Park.*
- c) Perform a PCB mass balance assessment in the Spokane River in the Planters Ferry Park/Upriver Dam/Greene Street reaches.*
- d) Conduct a PMF analysis utilizing available PCB data.*
- e) Develop outreach materials and/or update Spokane River toxics guide.*

- f) *Study to Understand Relationship Between Fish Tissue / Water Column / Sediment.*
- g) *Perform a PCB mass balance assessment in the River in the Spokane gage to Nine Mile gage segment.*
- h) *Educate local governments about PCB related Low Impact Development (LID).*
- i) *Green Chemistry Advancement.*
- j) *Conduct product testing.*
- k) *Survey Schools and Public Buildings.*

Q&A/COMMENTS: (Q=question, A=answer, C=comment)

- **C.** Jerry White (could not attend, but had comments for today’s meeting) would like to prioritize funding for outreach. This allotment of money could potentially fund proposals by individual entities.
- **Q.** What is the logic in item (a) versus (f)? Should they be combined? **A.** Dave Dilks explained that (a) is a screening-level study designed to look at bioaccumulation to see if PCB levels in fish can be explained by known factors or not; (f) is more related to Policy 1-11: half the fish PCB burden was 10 congeners, but of the congeners found in the water column, many of those ten are non-detects—why? And why the difference between Plantes Ferry and Mission? Are we missing a source?
- **C.** We may need to amend the study design to understand the correlation between water column and fish (what has been collected in the past may not be representative of what we need to know).
- **C.** Ecology cautioned: this could mean a bioaccumulation factor that lowers the water column standard.
- **C.** Fundamental question: are the PCBs in fish from discharger “pipes” fish, or from elsewhere? Focus on most effective approaches to reduce PCBs. Things to consider:
 - Fate and transport of PCBs (does stormwater contribute PCBs to fish?)
 - Goal: identify what sources are better to control to prevent fish exposure.
 - How do PCBs drop out of the water column, accumulate into sediment, and get into periphyton?
 - Do we understand the time it takes for bioaccumulation, at low PCB levels in the river? Do different species bioaccumulate at different rates?
 - Perhaps two studies:
 - Monitor changes in fish tissue; and
 - Trying to figure out via fish, where in the system sources are, and why the fish accumulates what it does (this second piece is complex, and we would need a fish contaminants expert).

DECISION: The group wants to do true science on PCBs in fish tissue, but recognized a lot more thought needs to go into it, so tabled this study until the parameters can be more thoroughly pulled together.

ACTION ITEM: Chris Donley to locate PCB or fish contaminant experts and begin to put a suggested scope of work together along with a small Task Force workgroup (*NOTE: On 10/4/17 the TTWG solicited volunteers for this fish sampling workgroup and came up with Brandee Era-Miller, Doug Krapas, Dave Dilks, Cadie Olson, Bud Leber, Lisa Dally Wilson, and Spokane County (TBD) in addition to Chris Donley and anyone else from WDFW.*)

Q&A/COMMENTS continued:

- **C.** Ecology would like the state funding used for Control Actions or projects that get at source reductions. They like item (b) but would like to see mass balance studies funded by SRSP moneys (EPA concurs).
- **Q.** How does public outreach get to source reduction? **A.** Targeted outreach can translate into action.
- **C.** The City is committed to identifying and reducing PCBs, but believes we have some science gaps.
- **C.** EPA supports a combination of science and source reduction projects; (j) caught Lucy Edmondson’s attention – conduct product testing (e.g. on road striping paint).
- **Q.** Question for Ecology: which projects lead to source control actions? **A.** Product testing, green chemistry, studying groundwater upgradient of Kaiser.
- **C.** Item (c) does the same thing as (b), and (d) could be a lower priority to move up other actions.

The ACE contract with Ecology needs delineations of how money will be spent. Sarah Hubbard Gray expressed concern that compartmentalizing what pot of money can be used for what work could undermine the collaborative nature of the Task Force process.

DECISION: The Task Force agreed to the following projects for the \$310,000 in legislative funding. Other moneys could fund other projects that did not get selected today.

up to \$140 K	b (study groundwater upgradient of Kaiser)	} Total: \$310,000	<i>d drops to lower priority; f to be followed up after more technical discussion.</i>
\$50,000	c (Plantes Ferry Park/Upriver Dam/Greene St. mass balance)		
\$10,000	i (support Green Chemistry)		
\$ 35,000	j (product testing)		
\$25,000	e (outreach)		
\$50,000	Partial Sampling		

Spokane River Forum:

Q. For the Ecology listening sessions presentation, what are the goals for presenting at Forum? **A.** It depends on where that process is, at that point in time. Ecology will discuss what they have heard. **C.** There is concern over the publicness of this discussion. **A.** Karin Baldwin said Ecology will not attribute sources, focusing more on general themes, to be transparent and let folks understand perspectives.

ACTION ITEM: Lisa Manning, Jerry White, AND Karin Baldwin to discuss the SRRTTF session for the Forum. Tom Agnew will ask BiJay if he can participate. (NOTE: Kara Whitman talked with Andy Dunau, who changed the session to a discussion of regional toxics outreach; the Task Force is no longer developing this session.)

LimnoTech Contract:

Decision to authorize ACE to add scope and budget to cover ad-hoc TTWG requests. Bud said ACE has \$10,000 in LimnoTech’s budget and ACE needs SRRTTF authorization to spend the money (up to that amount).

DECISION: The Task Force agreed to authorize ACE to add scope and budget to cover ad-hoc TTWG requests.

UPDATES and Announcements:

- November TTWG meeting: moved to November 8th, 2017.
- Ecology staffing: watershed unit supervisor (Dave Knight) moving to the air quality program. Adriane’s unit has four vacancies, with an uncertain timeline for filling Adriane’s old position.
- Academic Expertise: part of Ruckelshaus mission is to bring University resources to support collaborative policymaking. Given concerns about SRRTTF science, the Director of the two-university Center for Environmental Research, Education, and Outreach may attend the 12/13/17 Task Force meeting.
- Ecology has a webinar on 10/18/17 to talk about potential new Total Maximum Daily Load (TMDL) efforts. The Eastern Region of Ecology is not proposing any new TMDL starts.

ACTION ITEM: Chris Page invite Stephanie Hampton of CEREO to December Task Force meeting. (COMPLETE)

Process Management: Chris noted that several things are currently putting stressors on the collaboration: staff turnover, Policy 1-11, court case, permits etc. all at once. Chris asked Task Force participants to revisit the MOA, and remember why the SRRTTF came together in the first place. Cadie Olsen noted that all collaborative processes have external forces and when these cause issues, the group can revisit the groundrules.

No Public Comment

Next SRRTTF meeting October 25th, 2017 at Liberty Lake Sewer and Water District from 9:00am to 12:30pm

Next Technical Track Work Group meeting October 4, 2017 at Ecology in Spokane WA