

## Spokane River Regional Toxics Task Force

Technical Track Work Group Meeting (TTWG) | Wednesday October 4, 2017 | 10:00 am – 12:00 pm  
Department of Ecology | N. 4601 Monroe Street | Spokane, WA 99205

Meeting Documents: <http://srtrtf.org/?p=8395>

### Attendees:

Bijay Adams –Liberty Lake Sewer & Water District  
Mike Anderson –City of Coeur d’Alene  
Karin Baldwin –WA Dept. of Ecology (Ecology)  
Vicki Barthels –Spokane Regional Health District  
Ben Brattebo –Spokane County  
Lisa Dally Wilson (Video) –Spokane River  
Stewardship Partnership (SRSP)  
Dave Dilks (phone) –LimnoTech  
Jeff Donovan –City of Spokane  
Brent Downey –Kaiser Aluminum  
Brandee Era-Miller (phone) –Ecology  
Sarah Hubbard Gray (phone) – SRSP  
Mike LaScuola (phone) –Spokane Regional Health  
District

Bud Leber –Kaiser Aluminum  
Brian Nickel (phone) –U.S. Environmental  
Protection Agency (EPA)  
Cadie Olsen –City of Spokane  
Monica Ott –City of Post Falls  
Chris Page (video) –Ruckelshaus Center  
Adrienne Pearson –City of Spokane  
Bryce Robbert –Avista  
Rao Sangarmanchi (phone) –CDM Smith  
Jeremy Schmidt – Ecology  
Tim Towey (phone) –LimnoTech  
Sandy Trecanni –Ecology  
Kara Whitman –Ruckelshaus Center

### Introductions and agenda review:

After a round of introductions, Chris Page went over the agenda. No changes were made.

### Database Tour: Rao Sangarmanchi (CDM Smith)

Rao got some data from different sources loaded into the database. He said information with one tab (as from the City) is easiest, but he can work with multiple tabs. Bud Leber sent him the location and chain of custody Electronic Data Deliverables (EDDs). Rao loaded the City’s data to show the TTWG how it works.

- **Q.** For data without latitude and longitude, should lat/long number checks be left out? For the pilot, most of the sources are at defined points. When that’s not the case, lat and long will come into play more. Even with static locations – lat and long are helpful.
- **Q.** Is there a standardization for sample numbers? **A.** Can have any sample number, if it is unique.
- Do we need any validation for flow? Maybe something that allows the user to know this information was not available (e.g. if creek is dry) **A.** If you leave it blank it will show up blank in the database.
- Lab EDDs – analysis time, calibration data and instrument id are missing, bypassed them for now. Both concentration and EDL were missing for some data
- Rao will have some trend plots ready for the next call/meeting.
- Blank correction: need to associate the samples with the corresponding blanks.
- Can export info to .dbf files that can be imported into a GIS layer.

**ACTION ITEM:** Post Falls send lab data, Rao work with Brandee Era-Miller to get fish tissue data in database.

**ACTION ITEM:** Rao to present at October SRRTTF meeting (will have all the different types of data included).

### Presentation: Comparison of Homolog-Patterns for Groundwater Well Data and Suspected Loads

Dave Dilks explained that they compiled and assessed all relevant groundwater PCB data collected with Method 1668, and compared homolog patterns from wells in the area of suspected groundwater sources to homolog patterns observed in the PCB load entering the River from groundwater. The study identified a

correlation between patterns for three wells and estimated loads to the River. Wells upgradient of Kaiser match the Barker to Mirabeau load; the Kaiser wells match the Mirabeau to Trent, and Barker to Trent loads; and the GE wells match the Trent to Greene load. This is not a definitive conclusion of contribution (correlation does not mean causation), but should be considered evidence of contribution.

**Q&A/COMMENTS** (Q=question, A=Answer, C=Comment)

- Brian Nickel would like more detail on the assumptions related to the homolog load.
- **Q.** What would the cosine theta be if they took out the anomalous data point? **A.** None.
- **C.** Bud Leber plans to send in comments.
- **Q.** Did you compare Mirabeau load to aroclor 1254/1260? It seems to fit this pattern (often found in stormwater). **A.** Tim Towey (LimnoTech) did not compare estimated loads to aroclor patterns.

**ACTION ITEM:** Dave and Tim to compare estimated loads to aroclor patterns and report to the Task Force.

- **C.** Ben Brattebo said the County would send comments by early next week.
- **C.** On Page 8, the figure in the upper right-hand corner: need to fix the units.
- **C.** The anomalous high concentration at Mirabeau decreases the load represented downstream. It's possible that including it causes an artificial load and could impact on the downstream cosine theta.
- **Q.** Would there be a benefit to run cosine theta on wells at Kaiser? How stable is what is in the ground at Kaiser over time? **A.** In the appendix are all the fingerprints. Bud has run them already (background wells with average fingerprints, comparing Well MW5s with the average fingerprint from all data collected from 2010. Onsite wells have also been run for those with congener data, with not much change.
- **Q.** Did you notice a connection between concentration and time of year when the sample was taken? **A.** There are some. One sample for tetra, average over 14 samples is 15%, but one sample says 90.5 % concentration and the fingerprint bounces around.
- **Q.** Is there anything we know about how PCBs behave in groundwater to account for seasonal variability? **A.** There is seasonal correlation near source areas where PCBs are bound in soil and affected by high groundwater. Areas where there is not a smear of PCBs show less of a seasonal correlation.
- **C.** Liberty Lake Sewer and Water District did source tracing, and found variability between lift stations in wastewater; however, it was non-conclusive.
- **Q.** Comparing August river data – would it be prudent to do this only with groundwater data close in time to August? **A.** Tim said since the Kaiser site well pattern is relatively stable, he felt comfortable comparing that pattern. This leaves only the GE Well, which makes it hard to calculate the temporal variability (upgradient wells vary temporally more).
- **C.** It may be more prudent to use Well MW5 rather than MW5s for this reach. Often the concentration of MW5 is typically around 5pg/l, on occasion higher, but often quite low. They have more faith in the maximum for wells that have occasional high hits.
- **Q.** For the Mirabeau result with one high value: do we know anything about the behavior of groundwater at the time the high river result was observed? **A.** Six samples were taken over five days; they should have been similar for all five days. This was during very low flow, with flows constant during that period. Does this inform how much weight this value should be given?

**ACTION ITEM:** Send comments to Dave by October 11<sup>th</sup> for posting by October 18<sup>th</sup> for a Task Force decision at the October 25, 2017 Task Force meeting.

**Potential Projects to Propose to EAP:** Goal: select top tier of projects to propose to the Environmental Assessment Program (EAP). EAP could pull from already proposed projects, the Task Force could resubmit them or new projects, or could potentially leverage EAP funds (or staff) to make other projects more robust. Schedule: submit project proposals now to put them in front of the Water Quality Management team to help

make priorities clear; for projects that move forward, EAP requires more detailed proposals in January. Funds would not be available until July 1, 2018. EAP must select priorities from among all regions.

## Q&A/COMMENTS

- Brian Nickel: Expand the Mass Balance from Spokane to Nine Mile to become Green Street to Nine Mile, based on the incremental loads in that reach that are not consistent.
- Karin: for the Dissolved Oxygen (DO) TMDL, Ecology has been looking at groundwater. Maybe they could combine PCB groundwater stuff around Nine Mile with DO TMDL groundwater stuff. If the group is interested, Karin can explore this.
- Sediment Sampling project gets close to the topics in the long-term food web contaminant question (the longer, deeper study Chris Donley is leading):
  - EAP doing a closely-related Periphyton study in 2018; is this an opportunity to leverage funds, by weaving it into the Task Force (WDFW lead) study?
  - Could delay proposing a sediment sampling project, to develop it along with the fish tissue/water column/sediment effort? Can we outline some of this soon to dovetail with EAP projects?
  - Final EAP Project Proposals due in January, so this could potentially be considered if the Fish tissue/sediment/water column study gets defined by then.
- This brings up a project management issue: with many studies moving, can we track them in one place?
- Estimate of PCBs in stormwater: Jeff does not see this as useful given the unknowns. The City has lots of stormwater basins, all pretty small; collectively they may add up to something, but the prior Ecology study showed that most were in the typical range (except Union Station which has since been remediated). **Q.** Schedule for eliminating the Cochrane Basin outfall? **A.** The project is in design, currently 2020.
- **Q.** Can EAP do product testing? Product testing staff: one in EAP – Sarah (children’s products), and Kari Trumbull (state purchasing), and one other person. They maybe add onto work already underway.
- Structuring the scope for the ACE-Ecology contract – some projects did not get funded with the \$310,000, but SRSP funds could cover the additional projects.
- EAP project ideas to move forward:
  - Product Testing (supplemented by the SRRTTF-allocated \$35,000 of the state \$310,000) – Brandee needs to discuss internally (it is a question of resources, but they have staff and a testing lab). Roles: EPA is testing road paints; Doug is working with paint manufacturing groups. Ecology has done testing on products; while this did not result in action, it did assist in outreach efforts.
  - Mass Balance (either Green Street to Nine Mile, or Spokane to Nine Mile): better to use SRSP funding here, to conduct it simultaneously with the other sampling work. Purpose of the study? Dry weather flow data and surface water samples (synoptic survey again, but with flow data) to come up with a delta to determine mass balance. Could they all go together, using EAP and TF funding? DO TMDL is looking at GW here, a lot of groundwater coming in around Nine Mile dam, trying to figure this out. If we do a PCB mass balance we may find that there is a lot more groundwater coming in.

**Prepare a Gantt Chart of Projects?** The Task Force should identify someone to assist the new Ecology SRRTTF project manager (Adriane’s replacement) to create a Gantt chart of all this work (Brandee can help, and Cadie and Lisa Dally Wilson can review) for the SRRTTF to track it all.

**Fish Sampling Workgroup:** Chris Donley (WDFW) – Lead, Spokane County Rep (tbd), Doug Krapas, Brandee Era- Miller, Cadie Olsen, Dave Dilks, Lisa Dally Wilson.

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The next full Task Force meeting is October 25<sup>th</sup>, 2017 at Liberty Lake Sewer and Water District from 9:00 to 12:30 pm  
The next Technical Track Work Group is November 8, 2017 at Ecology in Spokane WA from 10:00 am to 12:00pm