# **Spokane River Regional Toxics Task Force**

Wednesday October 25, 2017 | 9:00 am – 12:30 pm
Liberty Lake Sewer and Water District | 22510 E. Mission AV, Liberty Lake, WA
Facilitated by the William D. Ruckelshaus Center (Chris Page and Kara Whitman)
Meeting Documents: http://srrttf.org/?p=8449

### Attendees:

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

Tom Agnew\*, BiJay Adams –Liberty Lake Sewer and Water District

Vikki Barthels\* - Spokane Regional Health District

Sharon Bosley\*, Lisa Manning, Angela Tagnani, Mike Zager -Kootenai Environmental Alliance

Galen Buterbaugh\* (phone) –Lake Spokane Association

Mike Hermanson\* - Spokane County

Don Keil\* -City of Coeur d'Alene

Doug Krapas\*, David Newton -Inland Empire Paper

Bud Leber\* -Kaiser Aluminum

Cadie Olsen\*, Jeff Donovan –City of Spokane

Rich Watson\* - Washington Department of Fish and Wildlife

Jerry White\* -Riverkeeper

#### **Advisors**

Karin Baldwin, Adriane Borgias, Brandee Era Miller (phone), Will Hobbs (phone), Debbie Sargeant (phone), Jeremy Schmidt – Washington state Department of Ecology (Ecology)

Brian Nickel (phone) –U.S. Environmental Protection Agency (EPA)

### **Public/Interested Parties**

Lisa Dally Wilson – Dally Environmental

Sundae Delgado –Washington state Department of Enterprise Services

Dave Dilks (phone) -LimnoTech

Bruce Howard –Avista

Monica Ott -City of Post Falls

### **Introductions and Agenda Review:**

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

### Previous Meeting Notes: Edits

- Page 5: add in \$50,000 to list of projects and funding (for partial sampling)
- Page 1: typos, should read \$46,489 uncommitted funds.
- Page 5: change "reexamine the process" to "revisit the groundrules."

**DECISION:** The Task Force approved the September 27, 2017 Task Force meeting notes with the above edits.

ACTION ITEM: Kara Whitman to edit September 27, 2017 meeting notes and post to srrttf.org. (COMPLETE)

# **TTWG Report and Technical Topics**

Administrative & Contracting Entity (ACE) Commitment Report: \$152,153 committed funds; \$46,497 uncommitted.

#### **Contracts and ACE work:**

• Database: ACE is working with AXYS to nail down the analytical files to get into the database. The scope of work with AXYS is put together, but not the dollars for execution.

- Ecology Contract: ACE met a week or so ago. Spokane River Stewardship Partnership (SRSP) had previously met to talk about providing funding, ACE requested funding from SRSP members at \$125,000; this money should be in the ACE account by the end of 2017.
- Funding from Members: the SRSP moneys plus the \$310,000 in Washington state legislative funding should finance all projects so far discussed. ACE still needs to work through a few things: Ruckelshaus, LimnoTech etc. The fish tissue water column study is not scoped and would need alternative funding. ACE developed a scope of work based on input at the last Task Force meeting. There are questions about timing on some things. Included Positive Matrix Factorization (PMF) Analysis for \$50,000. + the five projects approved at the last Task Force meeting.
- The \$310,000 comes out of the general fund, so only half can be spent during Fiscal Year 1, and the rest in FY2 (cannot roll over). This affects sequencing of projects, which will need working through. The SRRTTF needs to fully spend the money to maintain credibility with the legislature. If the Task Force must spend \$155K before June of 2018, it would help to move projects around. You can bill for incremental progress on different Tasks. You can do a QAPP before June 30<sup>th</sup>, even if monitoring will not happen until after that. Q. Ruckelshaus Contract and LimnoTech contracts are not in this list of projects. Can these budget items come out of the \$310.000? A. Yes.
- For project management of all these moving parts, we need to address the labor gap. Karin Baldwin is the point person for Ecology on this for now.

**ACTION ITEM:** Doug Krapas to talk with representative Ormsby to understand how this funding is to be used. Adriane Borgias to ask Garret Ward from Ecology to describe in writing how funds can be used. (COMPLETE)

**ACTION ITEM:** November meeting topic: project leads and project management.

**Database/CDM Smith:** Database development is on hold while AXYS gathers and formats data. LimnoTech is ready to send chain of custody and location Electronic Data Deliverables, but waiting for CDM Smith to send formatting instructions. All data needs to go to CDM Smith (Rao Sangarmanchi) so he can finish the database.

**ACTION ITEMS:** The database workgroup to work with Rao Sangarmanchi to finish the project, set dates, etc.

Groundwater Fingerprinting Memo—Decision: Accept LimnoTech memo as final work product? Dave Dilks received comments from EPA, Kaiser, and Spokane County, mostly providing clarification on things. There were no changes to the report conclusions. The only minor change was on a figure of the General Electric (GE) site, for accuracy. Dave checked this, and this is the only site map available at this time. The Toxic Cleanup Program (TCP) requested that the map be qualified as informational only.

**ACTION ITEM:** Jim Ross to work with LimnoTech and TCP (Jeremy Schmidt) to update map with well locations. (IN PROGRESS)

**ACTION ITEM:** Ruckelshaus Center to send out the revised map/memo when it is done so it can be reviewed.

**DECISION:** The Task Force approved the memo with the contingency that the map of the GE site be updated with correct well locations.

**Next Steps for Control Action (Comp Plan section 5.14):** Bud Leber to lead a small work group for Control Action 5.14 (to identify groundwater source up-gradient from Kaiser). The goal is to see if there is something coming in from groundwater that would trigger TCP involvement. Someone from the County (Mike Hermanson or other) will assist Bud, as will someone from Ecology (Karin Baldwin and/or Jim Ross).

**Environmental Assessment Program (EAP) Technical Presentation:** Will Hobbs with Ecology's EAP gave a presentation on Wenatchee River PCB and DDT Source assessment and accumulation of PCBs in the food web.

There is no Total Maximum Daily Load (TMDL) on PCBs for the Wenatchee River. EAP started a study in 2014 to examine periphyton accumulation on a Semi-Permeable Membrane Devices (SPMD) over a sampling period of a month, then looked at sucker and whitefish tissue. They also did water sampling at low flow.

The lower part of the watershed had significant levels of PCBs, upper watershed did not. EAP repeated the study in 2015, focusing on the lower basin (just PCBs in water) and found a similar pattern. EAP did not have get usable data using the Continuous Low-level Aquatic Monitoring (CLAM) sampler, due to the background contamination from the device. EAP is working with the CLAM to lower background contamination.

In 2014, EAP did biofilms at the same location as the SPMDs; this showed a clear increase in PCBs between Dryden and Old Monitor Bridge, leading to the PCB increase in the lower basin. This led to higher-frequency sampling in the lower basin, with similar results. Higher-flow sampling in 2015 showed the same trend, but at lower concentrations. EAP found transformers in the River in several locations (most not intact, and eroded), but ruled out instream contamination coming from them so identified reaches to hone in on upland sources.

Periphyton study: PCB congener distribution: Periphyton have an organic coating that PCBs bind to. The SPMD and algae sampling showed similar results, with strong differences in congener distribution suggesting two distinct sources of PCBs in the Wenatchee River. They also looked at whitefish to understand bioaccumulation in that River (hopefully leading to a bioaccumulation model), via literature review confirmed by looking at a small dataset of stomach content samples. Since caddisflies and mayflies appear to be the main whitefish diet in the Wenatchee, EAP targeted them for further study.

EAP sampled mostly whitefish fillets, prepared to EAP standard protocol for edible fish (similar to what was done in Spokane). For the bioaccumulation model, they also included a number of whole fish in the model. They did not measure discharge from the Leavenworth fish hatchery, as it was ruled out as a source. EAP found evidence that whitefish sampled in the lower basin, stay and accumulate PCBs mostly in the lower basin, not feeding much in the upperbasin.

EAP (Will Hobbs) will continue to hone in on some of the specific reaches. In Cashmere, the sources appear to be confined to a few hundred feet. Ecology TCP is in conversations with the City of Cashmere and Chelan County to understand how to move the forward in partnership with those local agencies.

**Q.** Why is Ecology so much further on this work in the Wenatchee River than the Spokane? **A.** There was a different focus from the beginning. Early on the Spokane work was focused on a quasi-TMDL. The Spokane work has informed the Wenatchee work. They have similar ecosystems, but Wenatchee does not have the same population and large urban inputs and dams that the Spokane River has. The Spokane River is much more complex (compartmentalized, tributaries, groundwater interaction etc.).

**Fish/sediment/invertebrate/water study:** Fish Sediment/invertebrate/water study: Chris Donley leading this. Rich explained that Chris Donnelly has started to talk to others. Brandee Era Miller also talked with Chris and will assist with the process. Brandee is developing a Quality Assessment Project Plan (QAPP) for doing some biofilm work in the Spokane River.

**Hatchery Feed Study**: Ecology studied fish feed as part of the Low-PCB Product Purchasing work with DES. They looked at 21 samples of fish feed purchased by WDFW, of different sizes and two different brands. They also looked at a bug-based feed, took two samples of hatchery disinfectants, and five samples of salts. The data will be available in spring of 2018. Fish feed is just one category of this work. They are considering doing a separate report for each category.

**ACTION ITEM**: Can Ecology to move the fish feed study though any faster? Karin B. or Adriane B. will ask EAP; are there other categories to push through faster, ahead of others?

### **DES Presentations: Sundae Delgado (Instructional Designer, DES)**

Sundae Delgado presented both an outreach video on PCBs and purchasing as well as a prototype of a tool to assist in purchasing decision making. She is working with folks to put the information in layman's terms, and wants Task Force feedback on the video and purchasing tool. Sundae needs to get these two items completed soon (approval within the o weeks).

**C.** Consider adding a question: is it a product likely to be disposed of down the drain? In other words, is there a pathway for it to reach a water body? prototype: www.youtube.com/watch?v=FbiqFV9cfic&feature=youtu.be

**ACTION ITEM:** Kara Whitman to send out announcement with Sundae Delgado's contact information to the Task Force asking for feedback on the outreach video and the PCB Calculator. (COMPLETE)

**Project Management / Tracking:** Lisa Dally Wilson drafted a spreadsheet to help track proposed/approved Task Force projects, using categories M (monitoring)/ C (control action). The spreadsheet pulls all current and planned the projects together, in the order the TTWG ranked them. **See Appendix A at end of notes.** 

- Note: There are efficiencies gained in doing the mass balance projects at the same time C3 (approved) and C7 (not chosen for the \$150,000).
- Prioritize what projects move forward when based on available funds, and figure out who will staffeach.
- For this tracking tool, don't separate legislative funding from other funding sources. Shaded projects in the table were not approved at the last meeting because of the artificial budgetary barrier; combine them now.
- PMF analysis is currently included in the ACE contract with Ecology. Could be FY2, after database is completed and Lisa Rodenburg has advance notice. Monica: may need a backup plan if the timing does not work (data availability, or Lisa's availability) Initiate a contract withher.
- C3. C7 combine, C7 is listed as a contingency project propose to use Greene Street to Nine Mile. Also, an EAP proposal project. Between EAP, Urban Water project (central tendency), and SRRTTF, if all using the same QAPP
  - the 3 entities working together could get this done, under different funding sources. As long as they can happen at the same time. There are a few unknowns about whether EAP can take it on or not. Top priority for requesting from EAP and part of its next funding cycle. Or don't propose to EAP and make it a TF run project One lead, one protocol.
- C8 is this already being done? LID regulations do they contain PCB discussions? Can watch this one and report back on this. Eastern Washington stormwater manual one thing being discussed is whether to integrate LID discussions. Tie in to these discussions.
- C9 (Green Chemistry) no discussion.
- C10 (Product Testing) remove.
- C11 (Survey Public Schools) ranked lowest. This one stays out of the funding buckets for now, with no clear know pathway from the building to the river or a nexus with the Clean Water Act. This is an element of the PCB chemical action plan (CAP); how is the PCB CAP beingexecuted?
- C5: add bullet to coordinate with the PCB CAP outreach on PCBs in publicschools.
- Larger discussion about who takes charge of these things. Could they hire a project consultant to manage these things? Assign project leads?

**ACTION ITEM**: Ecology to find out how the PCB Chemical Action Plan is being implemented as it relates to C10 and C11.

**ACTION ITEM:** Product testing is not appropriate for the EAP group, but there may be another avenue. Ecology will submit to EAP a Central Tendency study and continued technical support for SRRTTF.

**ACTION ITEM**: Project management discussion to be added to the TTWG Agenda. (COMPLETE)

Annual Implementation Review Summary: Who Prepares, What Should It Contain, What Format to Use?

**ACTION ITEM:** Ruckelshaus Center to pull together a template for the implementation review summary (IRS) to discuss at the Technical Track Work Group meeting. (COMPLETE)

## **Update on Low-PCB Road Paint:**

Doug Krapas talked with some suppliers, pigments association, etc. about participating in a pilot project to look at road paints. He asked for SRRTTF participation in a conference call, to include: Washington state Department of Transportation (WSDOT—Greg Lahti, who will retire in a few months), a DES rep, Doug Greenlund (City of Spokane), Spokane County (TBD), Ecology, EPA (Michelle Mullin/Lucy Edmondson).

**Announcement:** EPA Grant Opportunity: Healthy Watersheds Consortium – large scale watershed project. The City of Spokane is looking at pursuing this. EPA favors regional coordination on proposals

**ACTION ITEM:** Kara to send this announcement out again. (COMPLETE)

**Letter to Tekoa**: The Task Force had asked the Education and Outreach (E&O) work group to draft a letter to small communities "to tell them the PCB story" and invite them to engage in the process. Jerry White is working on the draft; when complete he will bring to the E&O work group for edits, then to the full Task Force.

### **Spokane River Forum:**

- Ecology to present on what they heard during listening sessions regardingpermits.
- Brandee Era-Miller and Siana Wong will present three PCB studies (on the Little Spokane Fish Hatchery, Atmospheric Deposition, and long-term monitoring at the Tribal boundary).
- Jerry White: Riverkeeper will present with the Puget Sound Keeper Alliance on "where they are at in the world of water." They will comment on non-point source pollution and the permits, to inform the public and the Task Force about where they are at; there should be no surprises. They strongly support the new water quality standard from the EPA, and the forum is an opportunity to explain why they support it.

The Task Force discussed following the MOA and "no surprises" as well as how entities are representing other Task Force members when engaging in public discourse.

**ACTION ITEM:** Add discussion of process management for SRRTTF to next Task Force agenda. (COMPLETE)

**Task Force Posters:** 4 panels. Approved. Change newsprint to "recycled paper", use version of poster with less yellow. Use the pie chart.

### **No Public Comment**

The next full Task Force meeting is November 29, 2017 at Liberty Lake Sewer and Water District. The next Technical Track Work Group meeting is December 6, 2017 at WA Department of Ecology.

Oct-17

Note - projects are listed in order of TTWG ranking. Red Status and shading denotes that a project was not chosen for SRRTTF funding in the 2017-2019 biennium. M=Monitoring; C= Control Action; S=Support for Task Force

Project Name and ID	Project Category	Description	Status	TTWG Ranking	Comp Plan Element	Budget Funding Source Funding Timeline		Project Lead	Schedule		
M.1 Partial Synoptic Sampling - High Frequency	Monitoring	Partial Synoptic Sampling - High Frequency Scope: Conduct multi-purpose synoptic sample at select locations to address Barker Road to Plantes Ferry Park groundwater contribution and track concentration changes. (Note: Ecology will also perform a central tendency data evaluation in 2019) (This element requires the SRRTTF to generate new additional data for compilation) Locations - Barker Road, Plantes Ferry Park, and Nine Mile gaging station locations Sampling Plan - Collect samples at each location four times during a calendar year so that each river flow regime is covered Frequency - Every other year	Approved for funding by SRRTTF - Septem ber 2017	Monitoring 1	Comp Plan Element 6.1 Implementation Effectiveness Assessment	\$50,000 / event (could be conducted twice over four-year period, for total of \$100,000)	SRRTTF YEAR 1 and 2	July 2017 - June 2019	?	Nov 2017 - Dec 2018 (4 alternative flow scenarios) Coordinate low flow sampling with C.3 and C.7 4 events during differing flow regimes	
C.1 Analyze existing data to identify potential relationships between homologs/congeners in the water column and homologs/congeners in fish tissue at Plantes Ferry Park	Control Action	Merged into C.6 - See C.6 Analyze existing data to identify potential relationships between homologs/congeners in the water column and homologs/congeners in fish tissue at Plantes Ferry Park Scope: Per LimnoTech scope, perform a screening level analysis with existing data to assess if fish tissue PCB concentrations are at a level generally consistent with observed water column concentrations.  Note this project has now been merged with project C.6 below	Address ed under C.6	Control Action 1	Comp Plan Element 6.3.1 Key Data Gaps	n/a	n/a	n/a	n/a	n/a	
C.2 Study groundwater upgradient of Kaiser	Control Action	Study groundwater upgradient of Kaiser at Industrial Park Scope: Utilize existing Kaiser groundwater data to develop a plan to determine the location of suspected sources within Industrial Park in collaborate with the Toxics Control Program which may involve the drilling and sampling of monitoring wells.	Approved for funding by SRRTTF - Septem ber 2017	Control Action 2	Comp Plan Element 5.14 Category C Identification of Sites of Concern for Contaminated Groundwater	~140K	SRRTTF- YEAR 1	July 2017 - June 2019	?	May be phased	

C.3 Perform a PCB mass balance assessment in the Spokane river in the Plantes Ferry Park/Upriver Dam /Green Street Reaches	Control Action	Perform a PCB mass balance assessment in the Spokane River in the Plantes Ferry Park/Upriver Dam/Greene Street reaches.  Scope: Collect dry weather flow data and surface water samples from these three locations to better determine the impacts of the gaining and losing reaches in the area. The addition of Upriver Dam location data will provide the opportunity to assess the impact of groundwater in the Upriver Dam to Greene Street gaining reach, where a contaminated groundwater site is located. (This work could also provide monitoring data based upon the option selected)	Approved for funding by SRRTTF - Septem ber 2017	Control Action 3	Comp Plan Element 5.14 Category C Identification of Sites of Concern for Contaminated Groundwater	~50K	SRRTTF - YEAR 2	July 2018 - June 2019	?	August or September 2018 - LOW FLOW
C.4 Conduct a PMF analysis utilizing available PCB data	Control Action	Conduct a PMF analysis utilizing available PCB data.  Scope: Dr. Rodenburg at Rutgers to perform a watershed scale PMF analysis using available analytical data including river data, discharger monitoring data, and groundwater data. Purpose would be to try and identify any PMF factors• that would help in the identification of specific source types such as Aroclors (legacy) or inadvertently produced PCBs.	Approved for funding by SRRTTF - Octo ber 2017	Control Action 4	Comp Plan Element 5.14 Category C Identification of Sites of Concern for Contaminated Groundwater	50K - 75K	SRRTTF - YEAR 1 or YEAR 2	July 2017 - June 2019		Schedule dependent on formatting data. Identify who will process data if database work is not completed
C.5 and C.11 Develop outreach materials and/or update Spokane River toxics guide.	Control Action	Develop outreach materials and/or update Spokane River toxics guide.  Scope: Develop various education and outreach materials to increase business and public awareness on how to 1) identify and dispose of PCB-containing items, and/or 2) adjust purchasing practices to select products with lower PCB content. Options include an information package and checklist for use by agencies that make site visits to businesses on PCB issues and management; public education and outreach materials on PCB waste disposal and selecting products with lower PCB content; updating the Spokane River toxics guide; adapting the San Francisco Estuary Project (SFEP) document to make it suitable for use as a guidance document for Spokane- area building contractors on how to reduce PCB load during demolition and remodeling (Third party preparation of materials); AND 3) Meet with Spokane Public Schools to educate them on PCB issues with respect to their presence in building materials.  Coordinate with PCB cap outreach.	Approved for funding by SRRTTF - Septem ber 2017	Control Action 5	Comp Plan Elements 5.8.2 Conduct public education on products containing PCBs; 5.9.2 Waste Disposal Assistance; 5.13 Building Demolition and Renovation Control; and 5.15.2 Actions That Require Development of New Work Plans	25K	SRRTTF- YEAR 1	July 2017 - June 2019	?	

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C.6/C.1 Study to Understand Relationship Between Fish Tissue / Water Column / Sediment.	Control Action	Study to Understand Relationship Between Fish Tissue / Water Column / Sediment.  Scope: SRRTTF's Spokane River data shows fairly consistent geometric mean PCB concentrations at Plantes Ferry Park and Greene Street, however, fish tissue data is markedly different at those locations. In an attempt to understand the cause of this difference, data collection in the Mission Park area would be undertaken. Water column sampling at Greene Street annually during four river flow regimes each year for three years. Sediment survey in the Mission Park area once during the same three-year period. With input from WDFW, sample fish tissue (three species), in the three years of age range, once at the end of three-year period. Also Included C.1 - Analyze existing data to identify potential relationship between homologs/congeners in the water column and homologs/congeners in fish tissue at Plantes Ferry Park.	Consider Funding under EAP if scope of work can be developed by January 2018	Control Action 6	Comp Plan Element 6.3 Studies to Address Data Gaps	~300K	Potential EAP Project		?	
C.7 Perform a PCB mass balance assessment in the River in the Spokane gage to Nine Mile gage segment.	Control Action	Perform a PCB mass balance assessment in the River from the Green Street gage (note 1) to the Spokane gage to Nine Mile gage segments.  Scope: Collect dry weather flow data and surface water samples from these three locations to better determine the impact of the gaining reaches in the area.  Groundwater flow into these reaches of the river has not yet been evaluated for PCB contribution.  (This work could also provide monitoring data based upon the option selected.)	Approved for funding by SRRTTF - October 2017-note 1 - TF discussed and added Green street to Spokane reach to provide complete mass balance	Control Action 7	Comp Plan Element 5.14 Category C Identification of Sites of Concern for Contaminated Groundwater	~50К	SRRTTF - YEAR 2	Note - For consistency, it would be best if this project occurred at the same time as C.3	?	August or September 2018 - LOW FLOW
C.8 Educate local governments about PCB related Low Impact Development (LID)	Control Action	Educate local governments about PCB related Low Impact Development (LID).  Scope: Prepare educational materials for and make presentations to local governments concerning the benefits of LID related to PCB with an emphasis on the City of Spokane's experience. (Third party preparation of materials)	Not approved for funding by SRRTTF - Sept- Oct 2017. Already being done Save for future consideration	Control Action 8	Comp Plan Element 5.4 Low Impact Development	~5K	n/a	n/a	n/a	
C.9 Green Chemistry Advancement	Control Action	Green Chemistry Advancement.  Scope: In coordination with Ecology's HWTRP, prepare a presentation/proposal to UC Berkeley Greener Solutions Program (develop a syllabus, and pursue funding for their efforts. Engage with WSU (CEREO?) with an eye toward WSU starting Greener Solutions Program (third party prep of materials)	Approved for funding by SRRTTF - September 2017	Control Action 9	Comp Plan Element 5.7.2 Support Green Chemistry Alternatives	10K	SRRTTF Year 1	July 2017 - June 2019	?	

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C.10 Conduct Product Testing	Control Action	Conduct product testing. Scope: Identify consumer products (dyes, etc.) to be tested for PCB utilizing input from previous Ecology testing data and others, such as the Spokane Solid Waste Directory.	Approved for funding by SRRTTF - September 2017	Control Action 10	Comp Plan Element 5.8 PCB Product Testing	~35K	SRRTTF Year 1 Also recommended for EAP funding EAP - Product testing, including road paint, in collaboration with EPA.	June 2017 - June 2018	?	
S.1		Ruckelshaus Facilitation - Annual Support - July 2017 - June 2019	Approved for funding by SRRTTF - October 2017	Support		~80К	SRRTTF Year 1	July 2017- June 2018		Apply July 2017 to present to new contract
S.2		LimnoTech Technical Support - January 2018 - December 31, 2018	Approved for funding by SRRTTF - October 2017	Support		~65	SRRTTF YEAR 1 and 2	July 2017- June 2019		Apply July 2017 to present to new contract

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