

SRRTTF Technical Track Work Group (TTWG) Meeting

DRAFT Meeting Notes

June 3, 2015 | 10:00am-12:00pm

Department of Ecology | 4601 North Monroe Street | Spokane WA 99205-1295

BiJay Adams – Liberty Lake Sewer & Water District

Jim Bellaty –WA Department of Ecology

Adriane Borgias – WA Department of Ecology

Ben Brattebo –Spokane County

Galen Buterbaugh – Lake Spokane Association

Lisa Dally-Wilson (phone) –Dally Environmental

Dave Dilks (phone) – LimnoTech

Jeff Donavan – City of Spokane

Joyce Duncan (phone)--Limnotech

Ryan Ekre – Inland Empire Paper

Brandee Era-Miller– WA Department of Ecology

Michael Friese, (phone) – WA Department of Ecology

Ted Hamlin – WA Department of Ecology

Kris Holm (phone) – City of Coeur D’Alene

Greg Lahti – WA Department of Transportation

Bud Leber – Kaiser Aluminum

Dave McBride (phone) – WA Department of Health

Dave Moss – Spokane County

Dale Norton (phone) – WA Department of Ecology

Sandy Phillips – Spokane Regional Health District

Kara Whitman –Ruckelshaus Center

Introductions and Agenda Review:

After a round of introductions, Adriane Borgias went over the agenda. Kris Holm requested to discuss the review and response to the fish hatchery permit at the beginning of the meeting. The agenda was rearranged to accommodate this request. Further, the discussion of the LimnoTech report draft was moved to the end of the meeting.

Fish Hatchery Permit

Kris Holm discussed the upcoming fish hatchery permits that will be available for comment in mid-July. The Task Force has talked several times about the need to have a group review the draft permit concerning PCBs, identification of PCBs in the effluent, sediments and other components. They talked with Fish and Wildlife, expressing an interest in including monitoring requirements in the permit conditions. After the draft permit is available for review, the Task Force will have 30 days to comment. Given that it is summer, and schedules can be difficult, Kris Holm, Galen Buterbaugh and the fish hatchery small working group are taking the lead on the response.

Fish Hatchery Focus group

Galen Buterbaugh discussed the work of the fish hatchery small work group. He explained the difficulties in assessing PCBs in fish feed, as the diets are continually changing because of a number of factors. The group feels that it is premature to hold a fish tissue workshop until the Environmental Assessment Program (EAP) projects are complete. The fish hatchery work group will help work on the review and response to the fish hatchery permit Draft that will be out in July. Galen discussed the importance of having PCBs in the language of the fish hatchery permit. Galen explained that the life cycle of fish hatchery fish depends on what the hatchery is stocking. It could be anywhere from 4 months up to 18 months. Brood stock is kept for 3 or 4 years.

Kris Holm asked about the progress of the EAP fish hatchery project? Dale explained that the project is scheduled for the next fiscal year. It will not be likely be ready until late summer or fall for sampling. The project plan will sample based on what best makes sense with operations at the hatchery.

ACTION ITEM: Kris Holm, Galen Buterbaugh and the fish hatchery small work group to work together to review and respond to the fish hatchery permit draft in July and bring the response to the Task Force for review.

Prioritization of Proposed upcoming LimnoTech/Gravity/AXYS work.

Dave Dilks and Joyce Duncan of LimnoTech gave a presentation on the LimnoTech high level scoping completed for the Task Force. The presentation helped to inform the prioritization of proposed upcoming work later in the meeting.

The presentation focused on high level scoping of unknown groundwater source identified by the fall 2014 synoptic study and by groundwater sampling completed by Kaiser Aluminum. To better define the source(s) of the “unknown” load they need to accomplish 2 tasks including: a review of available data, and develop and apply a groundwater loading model. Groundwater data collected by Kaiser, show very high, but localized concentrations of PCBs as well as background contamination of an unknown extent. LimnoTech conducted a simple mass loading analysis to assess what fraction of the estimated unknown load is from the localized source and to see how widespread the background concentration is. The groundwater model results were compared with the mass balance model. The analysis concluded that:

- The estimated load from background sources crossing Kaiser site = 91 mg/day
- The estimated load originating on the Kaiser site = 51-57 mg/day
- The estimated load of the unaccounted for load in the Barker to Trent segment = 13-99 mg/day

Dave explained the ramifications of this study. It is worthwhile to examine the nature of the background contamination entering the Kaiser property. It is also potentially worthwhile to examine the nature of contribution elsewhere in the Barker-Trent segment (these source contribute 7-40% of total load).

Monitoring options:

Up-gradient of Kaiser Property

There are two options for this based on installing 2 permanent shallow wells and sampling quarterly for one year. Monitoring would consist of sampling quarterly for one year at five wells.

- Option 1: Base the well location on a review of historical land use information.
- Option 2: Install and sample from five temporary wells that are already in place, then base permanent well location on the results of sampling the temporary wells. Cost based on a more expensive sonic grid (geo-probe not appropriate) 100' well depth. Possible that less expensive geo-probe could be used closer to the river.

Remainder of Barker-Trent Segment

LimnoTech recommends monitoring that consists of sampling quarterly for one year at five wells. EAP is currently compiling information on the location of suitable existing wells. Dave is in touch with Pam Marti to help target locations based on current/past land use and toxic cleanup sites. There will be a reconnaissance level study done before placing any wells if this monitoring is prioritized by the Task Force. BiJay Adams added that there is a landfill just upstream of the Barker Road that should be looked at.

Wet Weather Options

LimnoTech recommends four monitoring options for wet weather sampling. These included: 1) revisit and confirm the dry weather assessment for the Barker to Trent segment. 2) Revisit and confirm dry weather assessment for the Green Street to Trent segment. 3) Complete a limited sampling of stormwater outfalls. 4) Complete a wet weather sampling of Hangman Creek.

The costs associated with all proposed options are shown in the chart below.

-LimnoTech Costs-			
“Wet Weather”		Groundwater	
Update dry weather mass balance		Up-gradient of Kaiser Property	
- Barker Rd. to Trent only	\$40,000	- Location based on land use	\$70,000
- Greene St. to Spokane gage only	\$40,000	- Location based on monitoring	\$130,000
- Both segments	\$65,000		
Additional wet weather monitoring		Remainder of Barker-Trent	
- City of Spokane stormwater	\$14,000	- if suitable wells exist	\$55,000
- Hangman Creek	\$27,000	- if new wells required	\$130,000
Coordination/Project Management		Analysis	
- Develop monitoring scopes	\$5,000	- Update dry weather mass balance	\$7,500
- Participation in SRRTTF meetings	\$1200/mo	- Assess wet weather loads	\$5,000
- Project Management	\$400/mo	- Retrospective loading analysis	\$7,500
- Workshop attendance	\$5,000	- Assess groundwater loads	\$7,500
		- Reporting	\$5,000

Bud Leber summarized the document “Budget Forecasting”. The spreadsheet forecasts the costs of all proposed technical tasks out to 2017. The Administration and Contracting Entity (ACE) has revised terms and conditions with Spokane Community College regarding the installation of the Green Street gage. There are some outstanding questions that need to be answered. What is the timing for them to procure the equipment and get it installed? When will the tools be available to move forward with some of the work?

Q&A/Discussion

- Dale Norton: Would it make sense to add in selected sites to monitor current conditions for wet weather monitoring? Dave Dilks explained that this could be added in at a relatively low cost. This may be worthwhile to get some samples, not to support a mass balance, but to update the data from 12 years ago.
- Dave McBride asked why the Little Spokane River was not included with Hangman Creek for wet weather sampling. Dave Dilks explained that they can revisit this; however LimnoTech has been following the guideline of going no further than Nine-Mile dam.
- Michael Friese explained that an EAP study had intended to do wet weather and dry weather sampling, however conditions were not appropriate. Fish and sediment samples, taken from 4 sites on the Little Spokane River, are currently being analyzed.
- Ben Brattebo noted that he thinks that wet weather did appear to be a factor in the dry weather sampling. There were anomalies at Hangman creek and a few other places during wet weather events during the sampling. Total Suspended Solids (TSS) and Total Dissolved Solids (TDS) below detection limit, may indicate that it was surface water coming in. Assessment of incremental

load, 190 mg/day during one event. Dave Dilks disagreed with this assessment, stating that this is only the case to some extent. Did not increase as much as the Aug 22nd data indicated.

- Dale Norton explained that Lynn Schmidt and Will Hobbs are looking at stormwater loads from Combined Sewer Outfalls (CSOs). There are a lot of new data on stormwater. It may be good to examine these data prior to wet weather sampling/stormwater sampling.
- Ben Brattebo suggested that instead of sampling the groundwater, sample the river, and see where there is a change in concentration. Absorb this work to inform where wells should be installed. Options to do this: use temperature.

The group discussed the process for prioritizing the work. Bud suggests that the group take some time to get on the same page. All proposed projects were placed on the whiteboard and Technical Track Work Group meeting attendees provided 4 votes for prioritizing projects moving forward. The dot survey does not represent absolute votes but shows trends with respect to the order of interest in the projects. The following are the results of the dot survey in order of highest priority to lowest priority:

1. Incidental sampling*: 17 Votes
2. Dry Weather Sampling (both Barker to Trent and Green Street to Trent segments): 13 votes (note there was one vote to only do dry weather sampling on the Barker to Trent segment).
3. Groundwater: Up-gradient of Kaiser Property: 11 votes (4 specific votes for location based on land use, and 3 specific votes for location based on monitoring).
4. Retrospective Loading Analysis: 8 Votes
5. Groundwater: Remainder of Barker to Trent: 6 votes and (3 specific votes for using existing wells, and 2 specific votes for installing new wells).
6. Wet Weather: Hangman Creek: 6 Votes (City of Spokane Stormwater: 0 votes)
7. Other gaging: Trent Gage 5 Votes
8. Other Gaging: 9-mile 3 votes

New projects ideas:

- Ambient sites- collect samples monthly to understand seasonal variation. Previously proposed to the Environmental Protection Agency (EPA) to sample the outlet of Coeur d'Alene Lake over a year. Could sample below 9 Mile Dam and the mouth of the Little Spokane River. It would be good to do this once High Volume Sampling methodology is set.
- *Incidental Sampling: during wet weather, longitudinal sampling in the Barker to Trent segment to guide groundwater sampling.

LimnoTech Report

The group briefly discussed comments on the draft received from Spokane County. Dave Dilks commented on the county's comments. Is there sensitivity to including a bar chart on loads? To what extent do we want to report flow values from Avista for Nine Mile? Is this data useful? Should they show how variable they are day to day; and include a disclaimer that these numbers should not be used for hard calculations? Should there be a qualifier, or just stated as "not included". Dave also explained that some of the County's suggestions are not part of the original scope of work.

ACTION ITEM: Dave Dilks to contact Meghan Lunney at Avista regarding the validity of the flow data at Nine Mile.

Many in the group feel that they have not had enough time to review the document and review comments from the County posted on June 2, 2015. Lisa Dally Wilson explained that this is one of the most important pieces of work that the Task Force has put together. The Task Force needs time to digest and review the information. The group decided to extend the comment period for the LimnoTech Draft Report. Comments due in 2 weeks (June 17), for posting for the next Task Force meeting. Send comments to Kara Whitman (kmwhitman@wsu.edu).

ACTION ITEM: Kara Whitman to compile the results of the high level prioritization and provide to the Task Force in the meeting summary for review at the June Task Force meeting. (COMPLETE)

ACTION ITEM: Kara Whitman to send out email with the timeline for the review and comments of the LimnoTech Report. (COMPLETE)

ACTION ITEM: Task Force members to review LimnoTech Draft report and send comments to the Ruckelshaus Center no later than June 17th, to provide time to post for the Task Force meeting.

ACTION ITEM: LimnoTech Draft Report comments to be posted by Ruckelshaus Center, for full Task Force Review at the June Task Force meeting.

The next Spokane River Regional Toxics Task Force meeting is June 24, 2015 at Liberty Lake Sewer and Water District from 9am—12:30pm

The next Technical Track Work Group meeting is July 1st at the Department of Ecology from 10am –12:00pm