SRRTTF - Tech Track Work Group Meeting
Tuesday July 21: 10:30 am – 12:00 pm Pacific Time
ZOOM Meeting

Meeting Materials–

- PPT – Follow-up Investigations from Multi-media Data Collection (Dave Dilks, LimnoTech)
- Project Matrix developed from outcomes of Data Synthesis Workshop – 10-11-2019

Attendees:

Bill Baker, WDFW
Jeff Donovan, City of Spokane
Doug Krapas, IEP
Jeremy Schmidt, WA Department of Ecology
Karl Rains, WA Department of Ecology
Ken Windram, HARSB
Lisa Dally Wilson, Dally Environmental, SRSP
Joel Breems, Avista
Dave Dilks, LimnoTech
Alyssa Gersdorff, City of Post Falls
Brandee Era-Miller, WA Dept of Ecology
Bill Fees, WA Department of Ecology
Sandy Treccani, WA Department of Ecology
Cadie Olsen, City of Spokane
Brent Downey, Kaiser
Brian Nickel, USEPA
Logan Callen, City of Spokane
Kyle Shimabuku, Gonzaga University
Ben Floyd, White Bluffs

Note – action items in red

Purpose of Meeting, Expected Outcomes –

a. Further information, discussion and scoping of hot spot identification project
b. Discussion of prioritization of projects from data synthesis workshop for future grant opportunities

Hot Spot Identification -

a. Presentation of Results - Follow-up Investigations from Multi-media Data Collection (Dave Dilks, LimnoTech)
b. Group Discussion/Brainstorm
    - Rationale for focusing on Mission Reach, determine where the contamination in sediment and biofilm is coming from. Seems that water column is not necessarily correlated with the elevated biofilm or sediment concentrations in this reach. What about fish? Wait for fish sampling this fall to determine. Sources could be: contaminated fill in the river, contaminated bottom sediments, landside surface (storm sewers or CSOs), landside subsurface (possibly from upgradient sources in groundwater). Although overall a losing reach, groundwater occasionally recharges the river.
    - Can we sample a brick? Can we take samples of fill – this will help direct next steps.

- Jeremy is the contact with WDOT – If WDOT cannot, then Ecology will collect samples of fill at the Pier replacements at Trent Bridge in approximately 3 weeks. Ecology will collect samples but does not have the budget to analyze samples. Suggestion to collect a minimum of 3 samples per pier if using Method 1668 or 12 samples using Aroclor analysis first, then 1668 method if warranted. Need to find funding for analyses.
- Consider patterns in Aroclors or homologs in brick vs. biofilm. Perhaps this is something Dr. Rodenberg can help us with.
- EPA has lists of additional sites in the watershed that have had PCBs stored/used. This list does not indicate contamination just presence. Mike Anderson will map those EPA sites for the Mission Reach. Brian Nickel will have an EPA Virtual intern merge the map of PCB Hazard Assessment Sites identified by the City of Spokane and the EPA sites in proximity to the Mission Reach in the fall when the intern begins work.
- Groundwater/Surface Water Interaction – More complex than simply a losing reach. How can we determine if groundwater could periodically be a source of higher concentrations in biofilm?
  - Monitor levels in existing wells
  - Infrared camera to identify presence of groundwater influx
  - Float the River and monitor temperature looking for groundwater influx – Note this was actually done by Ecology and there is unpublished data for UpRiver Dam to Riverview and published data for Barker Road to Plantes Ferry. (Sandy Treccani will attempt to get the data and coordinate with Dave Dilks)
  - Most of these methods will not address the intermittent nature of groundwater flow direction
- Stream Bottom Contamination
  - Float the river and visually inspect bottom to identify extent and types of artificial fill
  - Bottom sub-profiling, using an electromagnetic device to locate potential presence of buried drums and/or transformers.
- Suggestion to put an SPMD closer to Mission Reach biofilm hotspots as part of water column sampling this August/September. Consider changing the Upper Falls site to Mission. Dave Dilks and Brandee Era-Miller to discuss further and update the SPMD QAPP if necessary.

c. Narrow Options and Determine Next Steps for Scoping 'Hotspot' Identification Task
- Suggestion to wait and see what fish and water column data show this fall before scoping larger hot spot project
- Will do the pier sampling at Trent Bridge and collect some bricks at the same time. Collect Brick/Rock and consider more samples using a cheaper analysis. Karl will coordinate with Brandee on this.

<u>Review of all Projects Scoped by TTWG for future SRRTTF implementation</u>

- Projects

II a. Follow-up Investigations from Multi-media Data Collection/ID Hot Spots
II b. Targeted Sampling to Define Non-Point Source Load During High Flow River Conditions
II c. PMF Phase 2B (Will be rescoped now that Monsanto case is settled)
II d. Improve Assessment of Dry Weather Groundwater Loads

i. Selective Low-Flow Water Column Synoptic Sampling (Spokane Gage to Nine Mile)
ii. Significance of Groundwater Loading from Sources Up-Gradient of Kaiser

- Prioritization – suggestion to wait until results from SPMD and fish sampling are understood. Then have scopes of work that are grant ready. Legislative appropriation is committed through June 2021. Will need additional funding to implement these projects.
- Suggestion that the SRRTTF help make a pitch to Ecology to use some of the Monsanto settlement dollars that will be placed in the General Fund to address PCBs in the Spokane River. Karl will get back to us on scheduling this effort.

Zoom Chat Notes:

10:04:32 From Ben Floyd : Just a heads up that I will only be on for the first hour
10:14:54 From Brian Nickel : Dave: You mean picograms per liter (not micrograms).
10:15:34 From Mike Anderson : Can Dave clarify Brians question?
10:26:40 From Brian Nickel : There are also some "PCB notification" facilities nearby (means PCBs were stored/transported, but not necessarily released).
10:39:02 From Brian Nickel : https://www.epa.gov/pcbs/notifications-polychlorinated-biphenyl-pcb-activities
10:42:17 From colsen : I have a question/comment too
10:49:38 From Ben Floyd : Here is a thought - in the Yakima we are partnering with USGS on several water quality studies - temp, DO, etc. We are able to leverage funding with additional federal funding to get more studies done. Could that be a possibility for these study ideas Dave is sharing?
10:55:26 From Logan Callen : Not necessarily around next steps but when comparing slide 6 on Kaiser up-gradient, and slide 12 of Hamilton Bridge, there seems to be a rough correlation between the times of inversions seen on Hamilton Bridge graph and the spikes on the Kaiser up-gradient charts. Difficult to compare because of different sampling time periods and resolution, but was something I noticed that seemed interesting
11:03:27 From Brandee Era-Miller : Maybe having all the potential PCBs sites in one map would be helpful? Sites from the EPA and City maps.
11:04:13 From Brian Nickel : I may be able to get my virtual intern to do that.

11:04:28 From Brian Nickel : (they won't start until September, though).
11:05:24 From colsen : ECY has everything the City has, but I agree, all the sites we know of on one map would be great. Let's get the virtual intern on it!
11:05:52 From Brandee Era-Miller : Just putting this out there, so it is captured in chat for the meeting notes. Could we add an SPMD site at the Mission area this summer?
11:11:58 From Kyle Shimabuku : In thinking about the biofilm sampling, it sounds like it is unclear how much PCBs are being absorbed into the biofilm biomass versus sediment depositing into biofilm. If future biofilm sampling is performed, could it be assessed if PCBs are biomass vs sediment associated? This could help answer where PCBs measured in biofilm came from.
11:13:35 From Brandee Era-Miller : To answer Kyle's question. I will talk to Will Hobbs about that: Sediment and surface water affecting biofilms.
11:15:11 From Ben Floyd : Dropping off - thanks all!
11:22:38 From Brandee Era-Miller : I can send the brick vs rock slide to all via email if there isn't time to go over on the call.
11:52:39 From colsen : I agree with Dave's wait for fish.
12:01:46 From Karl Rains : Thanks for coordinating Lisa, Dave and Brandee!!