

SRRTTF
Joint Tech Track/Fish Work Group Meeting
Tuesday, March 3, 2020: 10:00 am – 2:00 pm

Meeting Materials for Participant Review/Presentation –

- Preliminary Draft – Long Term Monitoring Memo
- Draft Technical Memorandum on high flow non-point source study
- Draft QAPP for Fish sampling in Spokane River
- PPT overview of LimnoTech Long-Term Monitoring Memo

Attendees:

In Person:

Mike Hermanson, Spokane County
Rob Lindsay, Spokane County
Joel Breems, Avista
Chris Donley, WDFW
Bud Leber, Kaiser
Jeff Donovan, City of Spokane
Bill Fees, WA Department of Ecology
Doug Krapas, IEP
Jim Ross, WA Department of Ecology
Jeremy Schmidt, WA Department of Ecology
Chris Moan, Avista
Karl Rains, WA Department of Ecology
Lisa Dally Wilson, Dally Environmental, SRSP

By Phone:

Dave Dilks, LimnoTech
Kris Holm
Dave McBride
Mike Anderson, City of Coeur d'Alene
Robert Mott
Brian Nickel, EPA
Alyssa Gersdorff, City of Post Falls
Brandee Era-Miller, WA Dept of Ecology
Will Hobbs, WA Department of Ecology

1. Welcome, Introductions, Purpose of Meeting
2. Expected Outcomes:
 - Presentation on Long-term monitoring memo by LimnoTech – TTWG members acquire similar level of understanding of objectives and methods
 - Provide Feedback to Dave Dilks regarding long-term monitoring approach and methodologies
 - Overview of Baseline Fish Sampling approach by Chris Donley – TTWG members acquire similar level of understanding of objectives of the project and methods
 - Possibly have recommendations to provide to SRRTTF (more likely requires a second meeting)
3. Discussion of General TTWG meeting protocol
 - Copies of handouts will only be brought to those who request them at least two days prior to the meeting (please email lisadallywilson@gmail.com & Joel.Breems@avistacorp.com)

- All ppt presentations and meeting materials will be posted on the SRRTTF website under TTWG (meeting date)
4. Coordination - Long-Term Trend Monitoring and Fish Baseline Monitoring projects: TTWG discussion of how best to coordinate the sampling effort associated with establishing a baseline for PCB concentrations in 1 year rainbow trout and long-term fish monitoring efforts. General consensus to integrate the two projects. To be determined: whether to include both projects in one QAPP.
 5. Long-Term Monitoring (includes Fish Workgroup QAPP)
 - PPT presentation and Overview of LimnoTech work done to date (Dave Dilks)
 - Overview of fish monitoring work done to date (Chris Donley)
 - Work group feedback on approach taken to evaluate long-term monitoring options and how to best incorporate goals of fish baseline monitoring study into long-term monitoring (all)

Discussion notes:

- Add “Technically and Legally Defensible” to objectives of long-term monitoring study (either as a stand-alone objective or part of QAPP or an element of an objective).
- Fish baseline study should be incorporated into long-term monitoring study. Consider one QAPP for both Fish Baseline and Long-term Monitoring study.
- Consider long-term monitoring QAPP that is structured to have addendums as we move forward.
- Fish baseline is additive to Ecology’s current efforts, not duplicative. It includes only 1 year rainbow trout.
- Discussion on sustainability definition. Concern that scoring does not account for positive aspects of new technology/sampling methods. Concern that we don’t want to render previous data unusable, or incomparable to new data. Concern over obsolescence. Consider changing scoring to reflect “Likelihood of method evolving.”
- Add text to page 27 of draft report at end of Recommended Opportunistically section “and they can be used to highlight measurable progress”.
- Dave Dilks noted he was softening his CLAM recommendation given Ecology’s recommendation for a follow-up study to ensure accuracy prior to use of the method. Bud added that the cost for such a study was \$85K.
- Brandee advocated for moving passive sampling (SPMD), Solid-phase passive devices for water column, and particulates (sediment trap) to highest consideration along with Year old wild rainbow trout and in-situ solid phase extraction (CLAM).
- Brandee brought up the temporal aspect of each of the sampling methodologies. See table below. This implies that some methodologies would need to be conducted at higher frequencies to be representative of river concentrations (eg., trout – once per year, SPMD – once per month)

- Dave Dilks suggested moving in-situ solid phase extraction (CLAM) to ‘opportunistic’ and use it if Ecology follows up on their recommendation (Hobbs et al 2019¹) that the method be further evaluated to confirm its accuracy and replaces future water column grab sampling with CLAMs.
- Several people brought up the concern that for a one day or a one month sample, the sample would be needed to be taken at the same flow rate year after year (not necessarily the same day of the year, but the day that had the most similar flow rate in that season).
- Robert Mott observed that the aquifer input is not being considered.
- Doug felt that we should consider media/methods that give information on fish tissue and water column since that is what regulation is based upon.
- How do we compare costs? Costs in memo are based on one sample event per year, but some methods will require/desire multiple samples per year. How do we reconcile this?
- TTWG Approach –
 - a) Narrow down media/methodologies from LimnoTech draft Tech Memo on long-term monitoring
 - b) For the subset of media/sampling methods, factor the number of stations, the number of times per year and cost such that they are all comparable.
 - c) Intention that all methodologies will use Method 1668

Results “Narrowing down Media/Methodologies to top tier priorities

Sampling Methodology/Medium	Integration Window (temporal representation of sample)	Select for Long-term Monitoring
Year-old wild rainbow trout	1 year	yes
In-situ solid phase extraction (CLAM)	1 day	(2)
Passive Sampling - SPMD	28 days	(2)
Solid-phase passive devices: water column	28 days ??	(2)
Particulates (Sediment trap)	3-4 months	(2)

Commented [LDW1]: Dave Dilks - I’m still figuring out how this would look, but suspect that it will contain columns for PCB fraction considered, cost per event, total cost to generate accurate annual representation.

¹ Page 51 in the Recommendations section:
 “A follow-up laboratory study should be conducted to test the accuracy of the SPE-CLAM device.”

² Decide on one or more other sampling methodologies for long-term monitoring study after LimnoTech conducts an assessment of the spatial and temporal frequency of each monitoring approach listed above and the cost associated with those approaches.

Dave Dilks will provide a summary memo outlining cost and comparable frequency for each of these five sampling methodologies/media (and other general pros and cons). The TTWG will then finalize recommendations for long-term monitoring to be presented to the SRRTTF.

6. High Flow Non-point Source Memo - The group did not have time to address the High Flow Non-point Source Memorandum and have scheduled a call on March 11th to discuss approach in the memo and conditional draft recommendations.

7. Next Steps

- March 11 Discussion of High flow non-point source monitoring memo – by conference call or WebEx from 11:30 – 1:30.
- LimnoTech comparable cost study for top five sample methodologies.
 - TTWG to review LimnoTech report and meet again to make final recommendations for long-term monitoring study (week of March 16).
- TTWG meet to discuss all potential projects – big picture and general scope of those projects prior to contracting. Prioritize amongst all projects prior to contracting (late March – early April).