Status & Trend Scientists Team Meeting Notes

Thursday August 21, 2025, 1:30 - 3:00 pm

Group Purpose: To bring together regional scientific expertise to guide long-term monitoring programs and support collective learning about improved stormwater management.

Meeting objective: Agreement on the current workplan; Begin consideration of trend study questions

Background Materials:

- Updated work plan
- Study Design Fact Sheet 2 pages
- Status Reports Please Read One
 - Puget Sound Small Streams
 - Puget Sound Nearshore Mussels
 - o Lower Columbia Urban Streams
- QAPPs Optional. Dig in if interested
 - o Puget Sound Small Streams QAPP
 - Puget Sound Nearshore Mussels QAPP
 - o Lower Columbia Urban Streams QAPP
- Draft Study Questions

Meeting Notes:

- 1. Review of the subgroup work plan (20 minutes)
 - a. Revisit the group purpose
 - i. We updated goal to include: "...our stormwater management efforts are protecting and improving aquatic ecosystems."
 - b. Affirm participant expectations
 - Meet monthly through Dec. 2025. Revisit the meeting schedule for 2026 in Nov.
 - ii. Participants should review background materials before meeting. We will aim to send out documents a week before the meeting.
 - iii. Please reach out to Chelsea or the planning team with any feedback on expectations or proposed meeting dates/ideas
 - iv. Calendar invites for the future meeting dates were sent out. Contact Chelsea if you'd like to be added.
 - c. Detail tasks, roles, and responsibilities
 - i. Divided tasks into two timeframes: 2025 and 2026 and beyond
 - ii. Revised milestones to start with study question development and follow with statistical methods
 - iii. ST Subgroup Work Plan got **12 votes to move forward** and 0 votes to keep discussing
- 2. Current SAM Receiving Water Study Questions (1 hour)
 - a. The Nutrient Reduction Project (NRP) was briefly discussed. It focuses largely on TN and TOC, since the goal is to reduce marine water nitrogen loads. Zack suggested we

- might consider a sub-study that would supplement the SAM dataset that is already contributing to the NRP. Teizeen could speak more about the overall effort at a future meeting. She works on Ecology's modeling efforts.
- b. We discussed the intention to co-locate the marine sediment monitoring sites with the mussel cage sites. There was confusion about whether the monitoring had been co-located before in 2016.
 - i. The summer 2016 sediment survey by USGS was not conducted at the same sites as the winter 2015/16 mussel survey conducted by WDFW.
 - ii. Scott confirmed this was the same for the Pierce County Mussel and Marine Sediment studies conducted during 2015-2016.
- c. We discussed whether we are doing a trend analysis for each strata or all strata at the same time. We settled on ideally conducting both analyses. It was pointed out that the percentage of impervious surface may change over time and a site might fall outside of the range for the strata. We should be careful with our data analysis in the future, as this will become more and more relevant in future trend analyses.
- d. Bob Hutton gave another shout out to King County's 2023 report analyzing 20 years of BIBI and sub-metrics versus contributing watershed / site drainage area impervious percentages for about 120 sites around King County. Includes statistical approaches and good summary graphics. Link: <u>Surprising Improvements in King</u> <u>County Stream Biotic Integrity Despite Increased Urban Development</u>
- 3. **Action Item:** Please consider the following between today and our next meeting: Do these study questions capture what we need for the trend analysis? What refinements to work or scope would make them clearer and more useful?
 - a. Please review draft study questions (link above) if you have not yet and add thoughts/edits directly onto the document
 - b. Please also review any of the current edits/comments to catch up on the work done, and discussions had, during the 8/21 meeting

Next Meeting:

- 1. Data overview high level introduction to the data collected, including time frame, parameters, and sites
- 2. Preliminary data exploration quick visualization of time series, box plots, cumulative distribution function plots