**Tribal Boundary Sampling Report**

**CLAM Comments**

* Glad to see that the non-linearity of the flow rate through the CLAM was addressed by collecting all the water that passed through the CLAM.
* It sounded as if one goal of the work was to work on “validating” the use of the CLAM by addressing contamination issues. Any thoughts about placing a CLAM in a large enough sample (small tank) of say lab blank water and actual river water samples at two different PCB levels and running the CLAM for 24 hours to simulate deployment and compare the CLAM results to the batch sample of water that was run through the CLAM to evaluate overall accuracy of the CLAM system? This might be a good look at the overall accuracy of the sampling methodology since the water samples would have measurable PCB concentrations? At one time AXYS proposed a protocol to do this type of validation work, but the Task Force chose to collect two liter samples instead for several reasons. Might to be worth it to look at the rigor of their experimental design if the intention is to essentially endorse the CLAM as an acceptable sampling technique.

**Sediment Results Discussion**

* Figure 14 compares sediment PCB concentrations from different years but for similar time periods. It may be helpful if some statistics about river flows (sampling period average daily flow; median flow, etc.) for the sampling periods shown were included as this might help explain some of the differences.
* Based on the Figure 14 data and the comment that the impoundments may be causing sediment to drop out, this would mean that the courser grain sediments have a higher concentration of PCB in them than the finer grain sediments that have more surface area. That does not seem to track with experience. Could this trend be impacted by sediment loads from Hangman Creek or the Little Spokane River?
* In looking back at the referenced 2003 sediment sampling events, the Harvard Road and Plantes Ferry locations ranged from 7.1 ng/g to 9.6 ng/g while the Nine Mile result was 69 ng/g, which is a different trend then the one referenced in the Figure 14 discussions.
* Following Figure 14, a comment is made about “significant groundwater sources upstream of Upriver Dam”. How does groundwater flow into the river impact sediment data trends downstream? The 2003 data (Harvard Road vs. Plantes Ferry) on sediment don’t appear to support an impact.
* On the comment about the potential for the release of water from the pool behind the dam impacting downstream sediment quality, it seems that any disturbance of any impounded sediment would be short lived and very localized to the intake structure of the dam.

**Observation**

The Comprehensive Plan shows that the geometric mean PCB concentration (2014 – 2016) in the Upriver Dam vicinity ranged from 107 pg/L at Plantes Ferry to 105 pg/L at Greene Street while the geometric mean was 132 pg/L at Nine Mile, a 24% increase in concentration. The sediment data for 2013 between Upriver Dam and Nine Mile showed a 32% decrease in PCB concentration. Besides a potential impact from Hangman Creek sediments, any thoughts on this?