LimnoTech
Water Environment | Scientists Engineers

SRRTTF
Tech Track Work Group Meeting

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Items

- Elevated lab blanks for some 2015 synoptic survey results
  - Do alternate blank correction methods help?
- Spokane County comments on “final” technical documents for 2014
  - Revise 2014 documents or address comments in culminating reports for 2015?
- Wet weather sampling recommendation

Elevated lab blanks

- Higher than acceptable PCB concentrations observed in two laboratory blanks
  - One of these elevated lab blanks affected data from 8/18 and (some) 8/19 samples
- Suggestion made at last Task Force meeting to re-do blank correction using field blank instead of lab blank
  - Four different field blanks were available

Blank-Corrected 2015 Data (pg/l)

Station	Location	8/18	8/19	8/20	8/21	8/22
SR-3	Spokane R. at Spokane	2.9 22.7, 48.2, 11.6, 4.6	1.9 32.9, 63.3, 19.4, 8.1	178.5	170.3	170.3
SR-4	Spokane R. at Greene St. Bridge	100.4 121, 136.7, 115, 103.5	52.2 35.6, 55.3, 19.9, 5.4	109.8	173.8	
SR-5	Spokane County Regional WRF	154.9; 137.9-192.7		465.9		322.8
SR-6	Inland Empire Paper	4265.8; 3927.8–4353.9		4449.3		3101
SR-7	Spokane R. at Below Trent Bridge	71.6; 137.1, 140.5, 115.1, 94.9	167.6; 132.3	133	119.7	155.9
SR-8	Kaiser Aluminum	2810.7 2832.1-2845.4		2789.6; 2645.8		3178.6
SR-8a	Spokane R. at Mirabeau Park	1.4 5.4, 12.6, 9.3, 4.3	16.7	5	8.4; 1.4	3
SR-9	Spokane R. at Barker Rd. Bridge	1 3.1, 8, 3.7, 1.8	6.6	20.4	108.1	7.42; 44.5

Elevated lab blank; Alternate blank used for correction; Acceptable blank

Options for Next Steps

1. ~~Proceed with alternate blank correction~~
2. Have AXYS re-analyze samples
   - Adds delay to mass balance analysis
3. Proceed with existing data
   - Discard tainted data, sacrifice “completeness”
4. Hybrid approach
   - Conduct draft analysis with existing data
   - Update approach when new AXYS data arrives

Comments on “Final” 2014 Technical Documents

- Certain items in our contract (or QAPP) weren’t explicitly spelled out as deliverables:
  - Data review/validation
  - Data usability assessment
  - Field data audit
  - Final synoptic survey database

Comments on “Final” 2014 Technical Documents

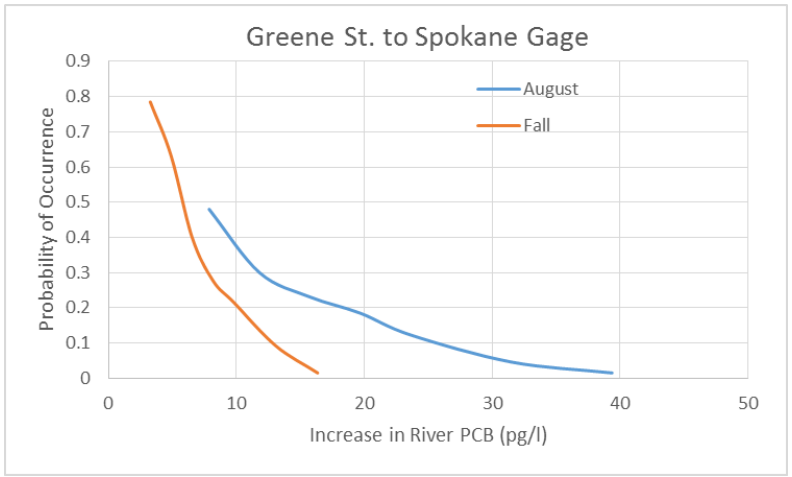
- Items were provided and posted to web site, but never given to larger group for review
- Spokane County reviewed these documents and provided several comments
  - Good, constructive comments
- Larger question is whether to go back and revise the 2014 documents or address comments in culminating reports for 2015?

Wet Weather Monitoring: Background

- Data assessment in 2013 identified wet weather PCB loading as a key data gap
- 2015 Workshop recommended wet weather monitoring
  - Conduct synoptic survey to support similar mass balance assessment as was done for dry weather

Wet Weather Monitoring: Background

- Subsequent analysis concluded that mass balance was unlikely to produce conclusive results
  - Increase in river concentrations likely too small



  - Mass balance assumes steady conditions (e.g. loads)

Wet Weather Monitoring: Background

- Feedback from November 2015 Task Force Meeting was that wet weather monitoring is still of interest

Wet Weather Monitoring: Recommendation

- Conduct wet weather monitoring *only if* the following types of results are acceptable
  - Synoptic snapshot of wet weather PCB concentrations in the river
  - Verification of assumption that existing loads don't cause a major increase in river concentration
    - Rule out (or, potentially, discover) "smoking gun"
  - Additional information on importance of Hangman Creek load

Wet Weather Monitoring: Recommendation

- Don’t conduct wet weather monitoring if the following results are *un*-acceptable
  - PCB mass loading at individual river stations are too noisy to accurately estimate wet weather loads
  - Minimal improvement in accuracy of annual MS4 loading estimate

Wet Weather Monitoring: Potential Components

- River Stations
  - Greenacres, Trent, Greene, Spokane Gage, Nine Mile
- External sources
  - Hangman Creek, Cochran basin stormwater
- Three days of sampling
  - Immediately post-storm and two subsequent days
- Cost
  - $50,000, plus contingencies