LimnoTech
Water Environment | Scientists Engineers

TTWG Report & Technical Topics

SRRTTF Meeting

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Items

- Elevated lab blanks received for some 2015 synoptic survey results
- Spokane County comments on “final” technical documents for 2014
- Wet weather sampling recommendation

Elevated lab blanks

- Higher than acceptable PCB concentrations observed in laboratory blanks
- Affected data from 8/18 and (some) 8/19 samples

Affect of Elevated Lab Blank on Blank-Corrected Data (pg/l)

Station	Location	8/18	8/19	8/20	8/21	8/22
SR-3	Spokane R. at Spokane	**2.9**	**1.9**	178.5	170.3	170.3
SR-4	Spokane R. at Greene St. Bridge	**100.4**	**52.2**	109.8	173.8	
SR-5	Spokane County Regional WRF	**154.9;**		465.9		322.8
SR-6	Inland Empire Paper	**4265.8;**		4449.3		3101
SR-7	Spokane R. at Below Trent Bridge	**71.6;**	167.6; 132.3	133	119.7	155.9
SR-8	Kaiser Aluminum	**2810.7**		2789.6; 2645.8		3178.6
SR-8a	Spokane R. at Mirabeau Park	**1.4**	16.7	5	8.4; 1.4	3
SR-9	Spokane R. at Barker Rd. Bridge	**1**	6.6	20.4	108.1	7.4; 44.5

Elevated lab blank; Acceptable blank

Elevated lab blanks

- Suggestion made at last Task Force meeting to re-do blank correction using field blanks
  - Four different field blanks were available

Results Using Trip Blanks for Correction (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	7.4; 44.5

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

Options Discussed at TTWG Meeting

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”

Consensus From TTWG Meeting

- Hybrid approach selected
  - Have AXYS re-analyze samples
  - Conduct draft analysis with existing data
  - Update results when new AXYS data arrives

Interim Results from Draft Analysis

- Confirmation of presence of groundwater source between Barker and Trent
- Potentially a smaller load entering between Greene St. and Spokane Gage
  - Still waiting on one lab sample

Comments on “Final” 2014 Technical Documents

- Certain items in our QAPP weren’t explicitly spelled out as deliverables
  - Items posted on web site, but never given to larger group for review
- Spokane County reviewed these documents and provided several comments
- Agreed at TTWG to incorporate the comments into “Revised Final” documents

Wet Weather Monitoring: Background

- 2015 Workshop recommended wet weather monitoring to support mass balance assessment
  - Subsequent analysis determined that mass balance was unlikely to produce conclusive results
- Feedback from November 2015 Task Force Meeting was that wet weather monitoring is still of interest

Monitoring Recommendation Provided to TTWG

- Wet weather monitoring can provide the following types of results
  - Snapshot of wet weather PCB concentrations
  - Verification that existing loads don't cause a major increase in river concentration
    - Rule out (or, potentially, discover) "smoking gun"
  - Additional information on Hangman Creek load

TTWG Monitoring Discussion

- High level draft of wet weather monitoring program presented at TTWG meeting
  - Single wet-weather event
- Diversity of opinions aired regarding monitoring objectives
  - Indirectly gain information about wet weather loads
  - Directly measure wet weather-sensitive sources
  - Better understand seasonal variability of river concentrations

TTWG Monitoring Discussion

- Diversity of opinions aired regarding monitoring intensity
  - Start with a single storm, and design future monitoring based on results received
    - Most efficient, but time consuming
  - Start with a more comprehensive program
- Survey developed and distributed to attain consensus on objectives
  - Responses due December 30