Suggestion for Handling Comments on draft Phase 2 Limnotech Report

Levels of Analysis: Suggestion for evaluating comments received.

Suggest that the comments received be evaluated and addressed using a *Five Levels of Analysis* technique. The five levels are:

Explicit: Facts that are unarguable, summative

Comments about the facts of the study should be considered and addressed. This would include the following:

- Comparison of work scope with the agreed upon Quality Assurance Project Plan and Sampling Analysis Plan. Did the project follow the QAPP and SAP. If there were deviations, where did they occur? What are the results of the Data quality assessment? Did it meet the Data quality objectives specified in the QAPP?
- Data that is presented in non-graphical form. (Are results correctly recorded, uncertainties appropriately noted, is data appropriately qualified?)

Implicit: Facts that are inferences based on meaning, arguable

Comments about conclusions that are presented should be evaluated and assumptions described.

- Are the assumptions correct? Are the uncertainties explained?
- Is the information presented as fact when it is really a conclusion and should be so noted? (Statements, graphical depictions, etc.)
- Was there consensus on the method used to reach the conclusions (modeling, data reduction, etc.)?

Theoretical: Conceptual, interrogative, to explain meaning

Comments that extend beyond the scope of the study and/or provide additional interpretation of the results should be evaluated against the scope and intent of the QAPP.

- Is the comment relevant based on the scope and intent of the QAPP?
- Is more study or information needed to address the comment?
- Is there consensus on the nature of the concept or interpretation of the meaning?

Interpretive: Emotional, visceral responses—how it is relative, how does it feel?

Comments based in emotion, judgment, "themes". Should be explored to gain a better understanding of the details behind the comment in order to define a path forward.

Applicable: What should be done?

Comments about recommendations should be evaluated against the scope and intent of the QAPP.

- Are recommendations called out as an explicit purpose in the QAPP and SAP?
- Has consensus been developed around any recommendations?

Comments on draft Phase 2 Limnotech Report

Bud Leber –Kaiser Aluminum Comments (note, Bud will have more comments)

- The report should contain as appendices the Gravity reports (pre-sampling assessment and results report).

Lynn Schmidt –City of Spokane Comments

I have reviewed the LimnoTech Phase 2 Technical Activities Report. Overall, it looks pretty good. One thing I would like to see is loading in mg/day from the dischargers in comparison with loading in mg/day in the river reaches. Specifically,

we could add a column to Tables 3 and 4, showing the Composite results in mg/day. Right now it is only pg/L. It would be nice to add graphical representation showing point source discharges in relation to their respective river reaches (using just the Composite results for each, which I think has the anomalies taken out) and subsequent unknown loading, all in mg/day.

City of CDA comments on draft Phase 2 Limnotech Report June 16, 2015

Pages 1-3

The introduction appropriately summarizes the limitations of the scope of the Phase 2 work conducted and presented in this report. The data collected for this phase are not sufficient to support any final defensible conclusions regarding specific loading from the known and unknown sources to the river. In addition more data may need to be collected to further describe potential sources.

Tables 4 and 5

Identify which "anomalous" results are being referenced in the text explanation following Table 5. Briefly describe how the mass balance results were modeled and how the values are used to identify potential additional sources (groundwater, stormwater/CSOs). Specifically describe any limits on usage of the data and modeled mass balance values. Do not include bar chart on sources based on these initial results. (see County comments.)

Page 10: Clarify that the mass balance results are preliminary and were used to begin to identify potential additional sources and their relative locations.

Page 15, Chapter 4 Seasonally Integrated Sampling

This brief section describes several concerns with the data collected during the 3 selected seasonal flows from Lake Coeur d'Alene. Is there a recommendation to try to repeat the seasonally integrated sampling at a later date?

Additional Comments

The focused purpose and limitations of the Phase 2 work should be emphasized in any use or presentation of the results of the work to date.

The report could also include a list of concerns with data collection and analysis to further emphasize the limits on the use of the data to draw broad conclusions.

Mike Petersen –Lands Council Comments

The report from LimnoTech results seems to indicate very different loading than the Ecology report - for some sources. This was verified by Lynn at the City. This has substantial bearing on where we put our resources. Also, LimnoTech provided concentrations and flow rates, and didn't create a loading chart that could be compared to the Ecology report.

A second issue is that some very high levels came from Hangman and a couple of the dischargers - which were considered anomalies and not included in the concentration averages. For example in the case of the high level one day from Hangman Creek, which might either be a lab am error or a source that was caught in the somewhat raised flow. This bears some discussion as well.

Environmental Assessment Program (EAP) Comments

(6-12-15) Comments from Dale Norton and Brandee Era-Miller, Environmental Assessment Program, WA State Department of Ecology for DRAFT: SRRTTF Phase 2 Technical Activities Report

General Comments:

- Title of the report should reflect the work performed
- A more complete documentation of methods would be helpful
- It might be useful to compare PCB concentrations to applicable Water Quality Standards (i.e., the NTR HHC of 170 pg/L)
- Include a presentation of the flow data for the sampling period
- Some of the graphs from the workshop that show incremental loading changes and estimated range of unknown loads as you move downstream would be helpful to be included in this report
- May want to consider adding a summary of conclusions
- May also want to consider adding a summary of data gaps

Page-specific Comments:

Pg. ES-1 Should the Executive Summary also provide a summary of the major conclusions?

Pg. 1 •First sentence, add bold blue italicized: "The Spokane River and Lake Spokane have been placed on [***Category 5 of***] the State of Washington's 303(d) list…"
•Comment: There are also Category 5 listings for 2,3,7,8-TCDD
•Second sentence, replace strikeout with bold blue italicized: "To address these impairments, the Department of Ecology (Ecology) is pursuing a ~~direct to implementation strategy~~ [***toxics reduction strategy***] that included the establishment…"
• Should be "land use" not "land used" in sentence under the 7th bullet.
•Fourth paragraph for sentence starting: "Based on the workshop consensus, first year Phase 2 monitoring focused…" replace "Lake Spokane" with Nine Mile Dam.
•Last paragraph, first sentence, add bold blue italicized and change "PCB sources" to PCB source: "The intent of the low flow synoptic survey was to support a mass balance assessment to identify the potential significance of groundwater [***inputs as a***] PCB source~~s~~.

Pg. 3 • Perhaps the Gravity field report should be included as an appendix so that is more easily accessible?

Pg. 4 •Figure 1 is a bit fuzzy. Can it be replaced with a clearer one?
•Sampling and analytical methods should be briefly described here even if QAPP is referenced.
•Is it possible to simply describe the blank-correction process?
•Where is the QA data? Is it available or can it be described?
•What were the "data validation activities"? Please describe.
•What about Hangman Creek (and it's outliers on 8/20 – 2450 pg/L and 8/22 – 297 pg/L) and also the dischargers (and the outlier at River side WWTP – 23,400 pg/L)? These analytical results should also be graphed and discussed here.

Pg. 5 •Figure 2 – can you show the line for the estimated detection limit?
•A presentation of the hydrograph during the sampling period and how it compares to average flow would help reader understand how the sampling period compares to average conditions.

Pg. 8 •Table 1 – Explain in footnote why there was no flow data at Barker Road on 8/12 and 8/22.
•Table 1 – Add year to the Title. This applies to Table 2 – 4 as well.
•Table 1 – There appears to be inconsistent use of significant figures. Four significant figures implies more certainty then present in analysis. This applies to Table 2 – 4 as well.

Pg.10 •Table 4 - With the exception of Liberty Lake, Any ideas as to why the composite values appear

to be lower in concentration than the average of what the samples that make-up the composite values would be?

•Using the wording "potentially anomalous" gives the perception that these data are likely wrong. The term outlier is probably better here as these values could be very much real. If you don't have the data to support the claim that the data are potentially anomalous then perhaps the data should be retained. If it's decided to leave the outliers out of the mass balance assessment, explain that it's simply because it doesn't fit the steady-state model.

•As in an earlier comment, the number of significant figures for 166 and 241 mg/day implies more certainty than there might really be.

Pg. 11 •Table 5 – What do the hash marks (-) mean? Please clarify for the reader.

Pg. 12 •Delete either "from" or "in" for 3rd sentence in 2nd paragraph under section 3.3.2. This sentence reads: "CSO loads were… <u>from in</u> 2012-2014."

•Can you show the data and calculations for estimating stormwater PCB loads (mg/day) in an appendix?

•According to the City of Spokane, there are ~120 stormwater outfalls. Analysis is primarily focused on CSO's so be careful about how stormwater is referenced.

•Table 6 – Data for MS4: how much of stormwater system is included in these estimates?

Pg. 13 • Define who the "Flow Monitoring Workgroup" is. Could their data be provided in an appendix?

•Some explanation for Figure 6 is needed. It seems that the "Potential Anomalous" PCB data excluded in Figure 6, but in Figure 5, Initial Mass Balance, there doesn't seem to be any loading between Trent Avenue and the Spokane Gage when anomalies are excluded. Why does addition of Greene to Spokane Gage flows potentially add a new load (58 mg/day) here?

Pg. 15 •Consider showing the results for this data here in the report.

Pg. A3 - A10 •Will the individual congener data be available? If the plan is to enter into EIM, then explain how to access this data. What is the EIM Study ID, etc.?

•Please explain qualifiers: UJ and < for homologues.

•Again, may want to evaluate appropriate use of significant figures for all these Appendix tables and especially for Total PCBs.

Spokane County Comments:

Overall Comments:

The sampling event that is the subject of this report is the most comprehensive evaluation of PCBs in the Spokane River in low flow conditions to date. The sampling is also the first defensible evaluation of Spokane River water column PCB concentrations. Therefore this report should be a complete documentation of the sampling event, the results, and analysis. As it is currently written, it would be difficult for a reader not familiar with SRRTTF activities, did not attend the referenced workshops, and is less familiar with the Spokane River/Aquifer system to understand what insights into PCBs within the Spokane River system can be derived from the sampling.

Executive Summary:

Include the following footnote to the first sentence:

- 1-PCB concentrations utilized to place the Spokane River and Lake Spokane on the 303(d) list was derived from fish tissue concentrations and a bioconcentration factor specified in the National Toxics Rule.

- The last sentence "Phase 3 activities are now underway to characterize the specific nature of these sources" give the reader the impression that Phase 2 activities are complete. Suggest adding "While Phase 2 activities are ongoing, Phase 3 …"
- Report additions suggested in the following comments should also be incorporated into the Executive Summary.

1 - Introduction:
Add a brief synopsis of previous data gathering activities that have been conducted that aimed to accomplish similar goals, such as Ecology's Source Assessment work and river concentrations derived from SPMDs, and river concentrations from Ecology's 2012 sampling. Also include the river concentrations calculated from fish tissue that was used to place the river on the 303(d) list.

Add a brief description of the study area and hydrology/hydrogeology. The significance of the groundwater and surface water interactions during low flow periods cannot be understated. The river
that leaves Lake CdA is significantly reduced by Barker Road and replaced by a river comprised of 75% groundwater and 25% surface water.

2 - Synoptic Survey:
How samples for PCB analysis are collected is extremely important. While the field activities are documented in Gravity's report, it is important to include some description of field activities in the report itself, especially factors related to analysis and conclusions found later in the report. Include a description of how the samples were collected, how the flow measurements were collected, difficulties encountered in the field, deviations from the QAPP. Include a description of the weather that occurred during sampling. While the rain gage at Felts field did not show a significant rain event, there was a significant rain event in the area that created a change in the river flow regime. In fact this sampling event, in essence, captured a significant wet weather event.

2.1 Sampling Locations:
Include a description of where in the river the samples were collected. What depth, in the middle, near the shore, etc.

2.2 Analytical Results:
Include a more thorough description of the analytical results, including a comparison to other data that has been collected, comparison to water quality standards, comparison to lab and field blanks, ranges of data found, QAQC results. An evaluation of homolog data could also be conducted, such as homolog comparison of samples moving downstream. There is no discussion of point source discharge samples.
Include a chart that compares loading from point sources and groundwater.

Remove qualitative statements such as "concentrations in this lower section of the river being much greater than those observed at the upstream stations"

The analytical results are very sensitive to blank correction method, therefore a thorough discussion of the blank correction method that was used and impacts to the results if of other accepted methods were used, such as blank subtraction, a 5x censor, using field blanks in addition to lab blanks. The reasoning for the choice of blank correction should also be included.
In addition to Figure 2, include a table of total PCB results. It appears there is some sort of color coding of the data points, but it is hard to distinguish. Also identify the anomalous data points.
3 - Mass Balance Assessment:
The first sentence states:
"The objective of the mass balance assessment is to use the results of the synoptic survey to determine if previously undocumented PCBs loads to the Spokane River exist during dry weather."

In the introduction it states "The intent of the low flow synoptic survey was to support a mass balance assessment to identify the potential significance of groundwater PCB sources."

If the intent was to evaluate undocumented groundwater sources, then that should be specified in the first sentence of this section.

3.1 – Conceptual Approach

The statement is made that the mass balance is based on the assumption that environmental loss processes are relatively insignificant. The assumption is based on analysis of the CE-QUAL-W2 model, observed data on suspended solids and literature. Is this a simplifying assumption that is valid at the level of the mass balance, but should be evaluated further? What are the implications of this assumption? Does this assumption include internal loading from sediments? More information about this assumption should be included.

The conceptual approach does not discuss the interaction of ground and surface water and the implications on PCB loading, or how groundwater was dealt with in the analysis.

3.2 - Initial Application:
What is the purpose of including the initial application of the mass balance?

The flows from Nine Mile given in Table 1 are incorrect and should be flagged or removed.

A discussion of "anomalous" data should be included. Are they outliers or are they data that represent a different flow regime? It appears that they are the data that was collected around the storm events in the area.

Removal of the anomalous values removes a source between Trent and the Spokane gage. If they are included there is a source. If the anomalous values are related to a storm event it seems plausible that the source could be related to the storm event. There is also a significant increase in concentrations in Hangman Creek on the same day as the anomalous value at the Spokane Gage. This could also be related to the storm event.

3.3 - Revision to Initial Application:
Again, why two different applications of the mass balance?

3.3.1 Sensitivity analysis of groundwater quality assumption
Evaluating groundwater as two different components (background and sources) adds unnecessary complexity. Groundwater PCB concentrations likely vary throughout the aquifer. The variance is likely related to several factors, such as the location and magnitude of sources, flow paths of the aquifer, etc.
The concentration is also likely the combination of many sources, and to label it as a singular source is not accurate.

Conceptually in each reach groundwater is a source or possibly a sink. With the mass balance those values can be estimated and reported for each reach. With that approach the assumption is that groundwater enters the river at a rate and concentration.

3.3.2 Evaluation of storm water and CSO loading
There is no need to evaluate the impact of storm water and CSO loading on the steady state low flow mass balance. The data that was considered anomalous is the data that was collected at the same time the storm water and CSO loading occurred, therefore there is little sensitivity to it. There is a missed opportunity to evaluate this loading as related to the data that was collected during the wet weather event.
3.3.4 Add Greene St. Segment

Indicate whether all of the data or the data without the anomalous values was used. With the anomalous values removed the mass balance indicates no source between Trent and Greene Street, while this analysis shows a source. If inclusion of the anomalous values create a source between Trent and Greene Street, and the anomalous values are related to a storm event, it stands to reason that the source between Trent and Greene could be storm water or CSO related. This possibility should be evaluated further.

4 – Seasonally Integrated Sampling
Include a map of the sampling locations, and analytical results.

Adriane Borgias, Ecology Water Quality Comments

1. **Use of the Quality Assurance Project Plan**

The intent of the Quality Assurance Project Plan is to guide the collection and interpretation of data. This document was approved by consensus of the Task Force and should be used to guide the preparation of the report, which would include the activities of data collection, data evaluation, data reduction and uncertainty analysis, and quality assurance evaluation. Specific examples are provided.

2. **Introduction**
   a. Section 1.2 of the QAPP provides the background for the Study and could be easily included at the beginning of the report to provide the context for this work. Include specifically the geographic scope and rationale for selecting the boundaries of the data collection.
   b. Include in the report the stated project objectives. Inferences as to the meaning of the data should be related to these objectives.

> *From the QAPP*
>
> The objective of this project is to collect the necessary data to eliminate the data gaps in order to conduct a **semi-quantitative PCB mass balance assessment** of the Spokane River (LimnoTech, 2014a). Based on **the results of the Confidence Interval Testing** described below (LimnoTech, 2014c) the project objectives have been revised as follows:
>
> a. The data shall be sufficient to **support a semi-quantitative mass balance assessment**, and be able to identify stream reaches where incremental loads lead to a significant increase in river concentrations.
> b. The data shall be sufficient to **support an adaptive management approach**, where grab sample results can be directly compared to results from other sampling methodologies to allow **determination of an improved monitoring approach** for future phases of this work.

Specifically, mention of the mass balance assessment should be qualified by the words "semi-quantitative" to clarify that there exist uncertainties about the data and the ability to do a quantitative loading assessment.

Discuss the results of the Confidence Interval Testing and the impact that it has on the data analysis: the 30 pg/L as a nominal limit for seeing a "signal" in the river due to additional PCB loading. This impacts any of the data that is presented as below that value. Consider noting that level on charts to denote the uncertainty of evaluating data below the 30 pg/L level.

Discuss the Data Quality assessment. How did the collected data compare with the Data Quality Objectives? And does it support the adaptive management approach? Are there any inferences that can be made regarding an improved monitoring approach?

3. Thinking in the future.

This report should be able to stand on its own in the future and the data preserved for future use.

1) QAPP, SAP and Axys reports should be included as Appendices.
2) Raw data supplied to Ecology in a manner that is uploadable to the EIM, in accordance with the ACE contract terms.

4. Data Quality Assessment

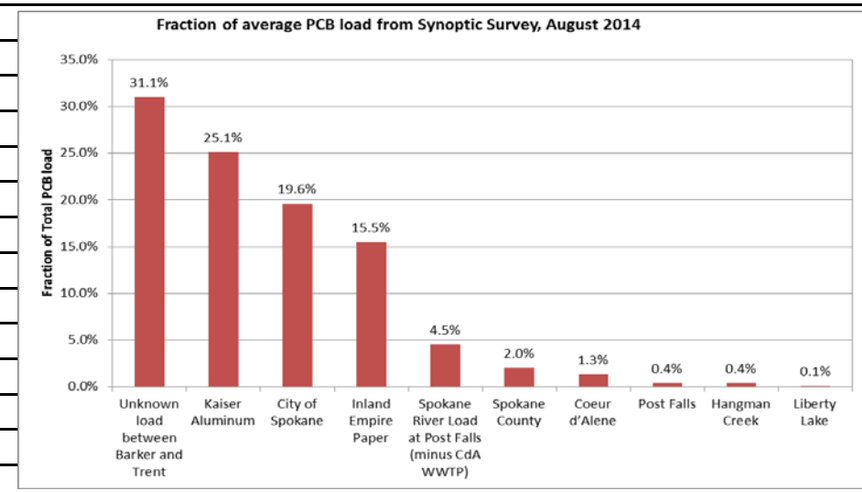
There needs to be a discussion about the data quality assessment per the QAPP

From the QAPP

The data that will be collected to support the Spokane River toxics reduction strategy will be evaluated relative to the data quality objectives outlined in this section. Data quality will be interpreted using the Data Quality Indicators (DQIs) which are the quantitative statistics and qualitative descriptors used to interpret the degree of acceptability of the data to the user. The DQIs include bias and precision, representativeness, completeness, comparability, and the required detection limits (sensitivity) for the analytical methods. These objectives also serve as a basis for developing the project's SAP.

Comments on:				
SRRTTF Phase 2 Technical Activities Report, DRAFT, May 20, 2015				
Prepared by:		Ben Brattebo, Spokane County Utilities		
28-May-15				
Page	Location	Comment		
9	Table 3	The tPCB values in the table are different from the tPCB data in the appendix. Please describe why they are different (likely blank correction)		
		What are the results from the high volume sampling?		
5	Figure 2	At each sample location, one of the points appears to have a "shadow" behind the marker. What does that represent? Please provide a legend		
7	Final paragraph	Use of the CE-QUAL-W2 model to represent the Spokane River seems unhelpful		
7	Final paragraph	Where are the results for the suspended sediment analysis that shows that losses between monitoring locations are small?		
8	Table 1	The flow values for Nine Mile Dam are not valid and should be excluded. A note should be provided of "data not collected"		
8	Table 1	Outlet of Lake Coeur d'Alene flow should be listed with note to say "data not collected"		
8	Table 1	Greene Street flow should be listed with note to say "data not collected"		
9	Table 3	Concentration data excluded from later analysis should be highlighted and noted "potential anomalies, excluded from later analysis"		
10	First paragraph	Is it appropriate to call the high values "anomalies"? They appear to be correlated to increased stream flow which may have resulted in differing flow paths and source loadings. They don't seem to fit with the "steady state" values, but are they really unexpected?		
10	Table 4	Concentration data excluded from later analysis should be highlighted and noted "potential anomalies, excluded from later analysis"		
10	Composite sample data	How were composite samples included in the loading analysis?		
10	Composite sample data	Were composite samples collected for a specific purpose? Did they meet that purpose?		
11	Table 5	Without flow data at Lake Coeur d'Alene outlet, it is not appropriate to present incremental load information for that reach. A note should say "unable to calculate load"		
11	Table 5	Without flow data at Nine Mile, it is not appropriate to present incremental load information for that reach. A note should say "unable to calculate load"		
11	Table 5	Please include negative values for incremental loads where they exist. They are very informative		
11	Table 5	What is the basis of these load calculations? Are they average flow x average concentration? Please clarify		

11	Figure 5	Please show negative values on the chart for incremental loads where they exist. They are very informative		
11	Figure 5	Without flow data at Nine Mile, it is not appropriate to present incremental load information for that reach. A note should say "unable to calculate load"		
New table/figure		Suggest adding a bar chart showing the average daily loads from each measured "source" to the river		
		Approximate data below, but please re-calculate using your "final" data		
		Source	**Load (mg/**	**Fraction of load**
		Unknown load between Barker and Trent	166.8	31.1%
		Kaiser Aluminum	134.8	25.1%
		City of Spokane	105.2	19.6%
		Inland Empire Paper	83.3	15.5%
		Spokane River Load at Post Falls (minus CdA WWTP)	24.2	4.5%
		Spokane County	11.0	2.0%
		Coeur d'Alene	7.0	1.3%
		Post Falls	2.0	0.4%
		Hangman Creek	2.0	0.4%
		Liberty Lake	0.6	0.1%
		Total load	537.0	100%
		Example Figure		



12	second paragraph, final sentence	If the steady state model is insensitive to the groundwater loading assumption, which method did you use? The original approach seems inappropriate because it introduces an assumption that groundwater concentration is known (equal to the upstream reach). That second approach avoids the assumption		
12	Table 6	Thank you for adding the stormwater (MS4 + CSO) loading analysis		
12	Table 6	The relative magnitude of the MS4 and CSO values are large compared to other measured sources (e.g. the smaller WWTP). On Aug 22 the Greene to Spokane MS4+CSO load (199 mg/d) would make it the largest "known" load to the river. Table 6 might indicate that 4 of the 7 river sampling days were "impacted" by storm events, yet the conclusion is that "results changed minimally, indicating that stormwater and CSO loading did not bias the original mass balance conclusions." Could part of that conclusion result from the exclusion of potential anomalies that might have been caused by stormwater? An alternate conclusion could be that the results were impacted by stormwater, but that the study wasn't temporarily refined to identify this.		
		Maybe this was a planned steady state event that ended up as a storm sampling event. During the sampling:		
		Barker flow more than doubled		
		Hangman Creek flow nearly doubled		
		Post Falls flow increased by more than 40%		
		Spokane Gage flow increased by 20%		
		Trent Bridge flow increased by 14%		
		Could these wet weather sampling results be used to fill a data gap?		
New figure		Add a figure to show the river flow variability during the sampling period (for example percent of maximum at each site for each day)		
New figure		Suggest adding a bar chart to show the relative magnitude of estimated MS4+CSO loads compared with the other measured loads (i.e. repeat bar chart above and add stormwater)		
12	Evaluation of Flows below Nine Mile Dam	What are the flow data presented in Table 1? They are not the sum of Spokane + Hangman as noted in final paragraph on page 12. If the conclusion is that Nine Flow are not known, then why present analysis with those data?		
13	First paragraph	What does the statement "...flows varied by several fold..." mean?		
13	Add Greene St segment	Thank you for considering estimated flows at Greene St		

13	Add Greene St segment	Load estimates resulting from adding a flow at Greene St will still be bound by the original Trent-to-Spokane load. Table 5 of this report represents Trent-to-Spokane as "-" though it is likely a small negative value. In figure 6 by adding flow at Greene the new cumulative gain from Trent-to-Spokane is approximately 65 mg/d (~5+58). This is not a possible outcome as it violates the Trent-to-Spokane value		
13	Add Greene St segment	By adding 255 cfs to Spokane to estimate Greene, the Spokane-to-Greene reach may actually have a negative unknown PCB gain. The report indicates it is positive 58 mg/d. Please recheck your calculation.		
13	Add Greene St segment	Estimated flow at Greene St could vary along a continuum of values. An alternate presentation to picking one value, could be to show how a range of Greene Street flows impact the PCB gain-vs-loss from Greene-to-Spokane (and similarly from Trent-to-Greene)		
13	Figure 6	Please show negative values on the chart for incremental loads where they exist. They are very informative		
13	Figure 6	Without flow data at Nine Mile, it is not appropriate to present incremental load information for that reach. A note should say "unable to calculate load"		
13	Figure 6	Without flow data at Lake Coeur d'Alene outlet, it is not appropriate to present incremental load information for that reach. A note should say "unable to calculate load"		
15	Final paragraph	The report states that during the spring confidence sampling "concentrations at the Lake Coeur d'Alene outlet were very low…" But the average August sampling results were lower than the spring results for both outlet of Coeur d'Alene and Mirabeau (vs Barker Rd). While the QA data for the spring sampling were problematic, it seems premature to dismiss the higher flow concentrations as lower than low flow.		
New section	Summary or conclusions	With the variety of scenarios presented, what is the final answer or conclusions from the work?		
A-1	Appendix	Are there any helpful findings from the other measured parameters? TOC, DOC, TSS, TDS		
A-1	Appendix	Table 9 of the SAP lists the required detection limit for TSS as 1 mg/L. Why are most of the TSS sample results listed as <5 mg/L?		