DATA MANAGEMENT WORKGROUP

March 9, 2016

Meeting Notes

Attendees:

Adriane Borgias, Ecology
Jeff Donovan, City of Spokane
Mike Hermanson, Spokane County
Kris Holm, representing City of Coeur d'Alene
Tim Towey, LimnoTech

Meeting objectives:

1) Consensus on purpose of the Data Management Workgroup
2) Consensus on data management goals
3) Overview DRBC materials for review

Notes:

1) Discussion about purpose of work group.

The group did not come to consensus about purpose of work group.

- The DRBC "charter" example doesn't apply to this group and so the group should specifically ask the Task Force what the purpose should be (although we can make suggestions).
- The main difference between this work group and the work that the DRBC does is that this group does not have the authority to dictate an approach, and the DRBC staff implemented the approach that was determined by the DRBC workgroup. A decision about who will implement the approach determined by the SRRTTF Data Management work group has not been deterimined.
- The Task Force should take the lead in determining what is needed with respect to data management framework. What is the overall approach with respect to continued data collection?

Key point: data quality specifications (including data collection techniques, analytical specifications, QAQC requirements, data flagging, data reporting requirements) are very important (such as provided by DRBC) and should be evaluated for applicability to Task Force work. Most of the DRBC specifications have been used to some degree in the SRRTTF QAPP. The documentation of how the decisions were made for the original QAPP is not complete (for example the 3x rule). Recommend that another work group evaluate the current QAPP as they are the basis for ensuring that good information is put into a database.

Example from DRBC: (discussed but did not come to agreement on this point – this is more related to data collection than management and would be a different task than data management).

(DRBC) Data Quality Subcommittee Charter

To establish a framework for collection of data so that

• Observed data can be used to identify significant sources

• Observed data are suitable for understanding contaminant fate and transport

• Analytical and data handling methods are identified to ensure that progress can be measured as the ambient concentrations of contaminates in the environment decrease

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2) Work Group Goals: What are the data management goals?

Key point: The data management goals in the box below are generally consistent with the work group thinking:

- Development of more refined loadings estimates in support of finding and reducing toxics inputs
- Comparable data sets for all aqueous sampling including tributaries, main stem, boundary locations. Also discussed that other media (sediment, fish, products, should be included)
- Provide uniform database for use by all interested parties. Also discussed that EIM is used by Ecology but the inability to associate the QA data with raw data is a "fatal flaw."
- Flexibility is an important characteristic and system needs to accommodate all relevant aspects of collected data:
    - Meets SRRTTF specifications
    - Other data quality requirements
    - Compatible with EIM
    - Can aggregate historical data and "nonconforming" data sets

Example from DRBC:

Data Management Goals

- Development of more refined loadings estimates in support of the Stage 2 PCB TMDL model.
- Comparable data sets for all aqueous sampling including; tributaries, main stem, boundary locations.
- Provide uniform database for use by all interested parties.

3) Path Forward

The key question is how a database will be adopted, developed, populated and managed by the Task Force. There are a range of options from hiring a consultant to do all aspects to a Task Force member agency taking on the task, or some combination of the two. The permits don't specify a database but do anticipate that the Task Force will: "identify a mutually agreeable entity to serve as a clearinghouse for data."

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Commented [HM1]: Is this in the MOA? It may be helpful to identify where it came from.

ACTION ITEM: Request that this topic be put onto the Task Force agenda for the April meeting. Tim Towey to prepare a range of possible options for discussion. Information from the workshop can also assist in the discussion.

Key questions for consideration:

- Development and implementation: population of database current and future
    - Related question nature of data to include in database: SRRTTF vs. other data
        - Universe of other data to be added and how this would be accomplished
        - Other "nonconforming" datasets and how to manage

    - What analysis tools are needed and how would they be used?
        - Data export
        - Graphical interfaces
- What is the lifetime of the system: expect timeframe for use (5 yrs, 10 yrs, etc.?)
- Who's going to do what? (contractor to ACE, individual TF member, questions about conflict of interest (real or perceived))
    - Development
    - Data input (initial and ongoing)
    - Quality assurance
    - Data retrieval

4) Delaware River Basin Standards review and path forward: http://www.nj.gov/drbc/quality/toxics/pcbs/monitoring.html

ACTION ITEM: These are very important but involve review as a separate effort. Concept would be that these are "specifications" or "SOPs" that can be approved by Task Force and available to entities to use when developing QAPPs. They should be reviewed in the context of the current QAPP (and prepare suggestions to modify QAPP for future studies, if needed).

Approved laboratories: http://www.nj.gov/drbc/library/documents/PCBLabsList_feb15.pdf

Big picture items:

- Evaluation against current QAPP, and laboratory specifications in the contract.
    - Do changes need to be made?
- Data Flags and reporting conventions (vary by laboratory)
- Calculation of PCB totals
    - Inclusion of flagged data in sum
    - Blank correction methods

Questions:
How many of these specifications to we currently cover in our QAPP and lab specs?
How do existing systems (e.g., Ecology's lab accreditation program and data evaluation services fit into this?)

Specific items:
Sample labeling protocol: http://www.nj.gov/drbc/library/documents/PCB-SampleID.pdf
Sample collection: http://www.nj.gov/drbc/library/documents/PCB-Techniques.pdf
Congener list: http://www.nj.gov/drbc/library/documents/PCB-CongenerList.pdf
Data Qualifiers: http://www.nj.gov/drbc/library/documents/PCB-DataQualFlags.pdf
Reporting Co-eluting Congeners: http://www.nj.gov/drbc/library/documents/PCB-CoelutingCongeners.pdf
Method Blank Contamination Decision Rules: http://www.nj.gov/drbc/library/documents/PCB-MethodBlankRules.pdf
Rinsate Blank Contamination Decision Rules: http://www.nj.gov/drbc/library/documents/PCB-Rinsate.pdf
Estimated Detection Limit: http://www.nj.gov/drbc/library/documents/PCB-EDL.pdf

Electronic Data Deliverables: http://www.nj.gov/drbc/library/documents/PCB-EDD011309.pdf
Hard Copy Data Package Deliverables: http://www.nj.gov/drbc/library/documents/PCB-hardcopydata021805.pdf

Other comments

Tim,

That is a great description of the options and considerations. I think these are the questions that need to be presented to the Task Force.

Thanks,

Mike Hermanson
Project Manager
Spokane County Water Resources
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From: Tim Towey [mailto:ttowey@limno.com]
Sent: Thursday, March 10, 2016 7:42 AM
To: Borgias, Adriane P. (ECY) <ABOR461@ECY.WA.GOV>; Kris Holm (krisholm@comcast.net) <krisholm@comcast.net>; Hermanson, Mike <MHERMANSON@spokanecounty.org>; Donovan, Jeffery <jdonovan@spokanecity.org>
Cc: Chris Page (c.page@wsu.edu) <c.page@wsu.edu>; Whitman, Kara Michelle <kmwhitman@wsu.edu>; Dave Dilks <ddilks@limno.com>
Subject: RE: Notes for your review

Good call yesterday. Here are my initial thoughts on the permutations of the "who is going to do it?" possibilities. Please add or edit as you see fit. A few of the "Cost and considerations" bullets are based on things I heard yesterday, but are largely my own thoughts. I would definitely like other folks to weigh in. Let me know if you have any questions.

Thanks,

Tim

Potential options to answer the "who is going to do it?" question for SRRTTF data management system:

- Consultant develop and initially populate database, SRRTTF member group will maintain and add datasets
- Use EQUIS data system, SRRTTF member group will format and add datasets
- Consultant develop and initially populate database, intern or part-time employee will maintain and add datasets
- Use EQUIS data system, intern or part-time employee will format and add datasets
- Consultant develop, populate, and maintain database
- Continue ad-hoc data aggregation approach without formal database (knowing that task force collected data will need to be added to EIM)

Cost and other considerations:

- Consultant development of database is more scalable in terms of cost than EQUIS

    - Likely less expensive than EQUIS system for development of relatively simple access database designed primarily for storage – particularly if the system is built largely on the DRBC access template
    - Could be more expensive than EQUIS for highly customized system with multiple graphical user interfaces for data retrieval and data visualization
- SRRTTF member group maintaining database would require long-term commitment from one of the parties, but may allow for group to better respond to ebbs and flows of data management related work (data management for a project this size may be better suited to full-time commitment occasionally with periods of down time, rather than consistent part-time work)
- SRRTTF member group maintaining database may be perceived as conflict of interest by other task force parties
- Consultant developing, populating, and maintaining a system would also be responsive to timing of data management work but is likely the most expensive option

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All,

Greg Cavallo from the DRBC sent me the DRBC Access Database and some test files to try out. After spending a little time with it I think this database has real potential for use by the SRRTTF. There would be a need to have someone familiar with visual basic coding in Access to make changes and trouble shoot issues that may arise, but it would be a really good framework to start with.

Thanks,

Mike Hermanson
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