

**Minnesota 3M PFC Settlement
Drinking Water Supply Technical Subgroup 1 Meeting
February 20, 2019 Meeting Notes**

Group members in attendance:

Brian Bachmeier	Jason Moeckel
Chris Bryan	Karla Peterson
Ryan Burfeind	Tony Runkel
Jack Griffin	Jim Stanton
Jon Herdegen	Jamie Wallerstedt
Greg Johnson	Molly Wellens
Ray Kaiser	Jim Westerman
Steve Love	

Presenters:

- Jamie Wallerstedt, MPCA
- Brian McBride, Wood
- Jim Feild (Wood) and Glen Champion (DNR)
- Hannah Albertus-Benham, Wood
- Dave Mills, Abt Associates (Abt)
- Milt Thomas, facilitator (MPCA)

Welcome and Updates

Jason Moeckel (DNR) and Jamie Wallerstedt (MPCA) welcomed the subgroup and provided some quick updates and overviews of the Citizens Business and 3M Government workgroup meetings from the day before (February 19, 2019) and earlier that morning (February 20, 2019) respectively. Jamie then gave a brief presentation orienting the subgroup with respect to activities completed to date and the timing for remaining work anticipated in 2019 required to produce the Conceptual Drinking Water Supply Plan (CDWSP). This discussion focused on information the state and its contractors (Wood and Abt) expect to provide the subgroup over the next three months, plans for the review of that information, and other data or tasks the state anticipated the subgroup will contribute to over that time. This presentation was also used to help clarify how the state anticipates Subgroup 1 will support efforts to produce the CDSWP by providing technical analyses, reviews, and evaluations; and current thinking with regard to integrating groundwater experts and information (a topic covered in greater detail in the Feild and Champion presentation). This component of the agenda concluded with Jason inviting the subgroup members, and other meeting participants, to introduce themselves.

Check in and Feedback from Subgroup Members

Jason Moeckel introduced this agenda topic observing the state plans to make it a standing item for future Subgroup 1 meetings in order to hear from participants with respect to questions, challenges, successes or requests for information that have developed in the course of their work since the last meeting. Topics reviewed in this portion of the meeting included:

- Some communities experiencing initial complications with data transfers to Wood because of software differences. However, it was noted these issues were quickly resolved with phone and email correspondence and probably will be a one-time issue.
- Discussion of EPA’s announcement will initiate efforts in the process to develop maximum contaminant levels (MCLs) for two PFAS-related compounds (PFOA, PFOS). Following a request for comment, Jason Moeckel and Karla Peterson (MDH) noted that, as a regulatory effort, this would likely be a multi-year process. At the same time, they noted the state is monitoring the effort and can/will provide updates as requested or events warrant. There was also subsequent discussion of PFAS background materials available through the Water Research Foundation and for an update on the state’s review of potential treatment technologies (Wood noted it would post previously mentioned background research papers to the subgroup’s Wood-hosted Sharepoint site).
- A request for an update on the expedited project process and details on how Subgroup 1 might engage to evaluate proposed projects.
- A request for additional information on how the Metropolitan Council evaluates and plans for wastewater services recognizing the complementary nature of these services to providing sustainable sources of clean drinking water.

Update on Regional Community Water System Profile

Brian McBride of Wood reviewed the status of the community system data collection effort to support the CDWSP. Brian noted all 13 communities had participated and the collected data were being processed while responses to clarifying questions continued. One detail of note mentioned by Brian is that 5 of the 13 communities being addressed by the CDWSP lack a public water supply system for its residents, instead relying on private wells for water supply.

Presentation on the Proposed Groundwater Modeling Effort

Jim Feild (Wood) and Glen Champion (DNR) presented on the topics of groundwater modeling in general and how Wood’s groundwater modeling effort would support development of the CDWSP. The presentation and discussion addressed a number of topics including:

- Review of some of previously developed groundwater models applied in various contexts in Washington County (e.g., Metro Model 3, Northeast Metro Lake Groundwater Model, South Washington County Model, Wellhead Protection Area models)
- General considerations the modeling effort will need to, or should, address (e.g., safe yield levels, avoiding adverse impacts) consistent with a potentially site-specific definition of “sustainability”
- General types of questions groundwater models can inform
- What a conceptual site groundwater model would look like
- Approaches for approach contaminant transport modeling (e.g., particle or contaminant-specific)

A consistent theme of the presentation was groundwater models are tools. Further, tools are best for addressing questions that were developed, reviewed, considered, and addressed at the outset as those initial questions will shape how the model is developed. Related discussion noted that a key subgroup activity will be to evaluate critical components of the conceptual groundwater model, particularly initial assumptions. Remaining questions addressed included how existing PFAS pathway work (e.g., from the Department of Health), and options for eventually completing an uncertainty assessment of the results.

This discussion also led to questions about if, when, and how the groundwater-focused technical subgroup (i.e., Subgroup 2) might be stood up by the state and how it would work with Subgroup 1. The state noted that details of if and how to formally stand up Subgroup 2 were ongoing but that those experts initial focus was going to be to support the CDWSP's development.

Public Comments and Questions

Members of the public were given the opportunity to ask questions. No questions or comments were offered at this time.

Overview of Water Treatment and Supply System Options

Brian McBride (Wood) gave a presentation that expanded on information previously provided by Wood in prior work group meetings. The presentation had two focal areas: establishing a common terminology for elements of the Conceptual Drinking Water Supply Plan and reviewing key treatment approaches along a spectrum organized from extremely decentralized to highly centralized systems. This spectrum ranged from point of use approaches (e.g., filters on individual spigots) as the most decentralized type of option to water treatment and distribution facilities that serve all, or parts of, multiple local government units as being the most centralized type of option. For the different options, Brian described a number of typical distinguishing characteristics, including: the extent and nature of existing/needed infrastructure, approximate numbers of users the option could support (e.g., single spigot/household, multiple families, multiple communities), and typical management structures (e.g., household responsibility, collection of users in some sort of legal partnership, contract for 3rd party system maintenance, community ownership and representation in a formal governing board).

Upcoming Tasks, Interim Deliverables, and Timeline

Hannah Albertus-Benham of Wood gave a presentation that provided additional details with respect to the expected flow of materials (deliverables) to Subgroup 1 participants and the expected review activities anticipated over the next three months. This near-term focus was given some context within the general scope of activity required to complete the CDWSP in 2019.

Next Steps: Homework, Upcoming Meetings, and Review/Request for Specific Agenda Items

Dave Mills (Abt) briefly reviewed that the next Subgroup 1 meeting is currently scheduled for March 20, 2019, and then opened a discussion to request future discussion topics. The following items were noted:

- A request to have all presentations, for Subgroup 1 and the work groups, made available through the Wood Sharepoint site
- A suggestion to have a "How-to-use" video recorded as a guide for the Wood Sharepoint site
- A request for information from DNR/MDH to present on prior work and/or perspectives with respect to the potential use of surface water resources for drinking water, with an emphasis on the St. Croix and Mississippi Rivers.

Public Comments and Questions

Members of the public were given the opportunity to ask questions. No questions or comments were offered at this time.