Minutes of the

REGULAR MEETING OF THE METROPOLITAN AREA WATER SUPPLY TECHNICAL ADVISORY COMMITTEE (TAC) COMMITTEE

Wednesday, July 25, 2018

Committee Members Present:

Scott Anderson, Kristin Asher, John Dustman, Robert Ellis, Dale Folen, Mark Maloney and Lih-in-Rezania.

Committee Members Absent:

Jennifer Levitt, G.H. Crystal Ng, Chris Petree, James Stark, Jamie Wallerstedt, Bruce Westby and Ray Wuolo.

Dean Lotter, MAWSAC Liaison

CALL TO ORDER

Chair Mark Maloney convened the meeting of the Council's Metropolitan Area Water Supply Technical Advisory Committee (TAC) at 1:08 p.m. on Wednesday, July 25, 2018.

APPROVAL OF AGENDA AND MINUTES

The agenda was reviewed with those present and no changes were noted.

The minutes of the May 23, 2018 joint meeting of the Metropolitan Area Water Supply Advisory Committee (MAWSAC) and Technical Advisory Committee (TAC) Committee were reviewed with those present and no changes were noted.

ONE WATER SUMMIT RECAP

The U.S. Water Alliance held their annual One Water Summit here in the Twin Cities for the first time in early July. The Metropolitan Council was the local host organization and partnered with area agencies to showcase our commitment to clean water here in Minnesota. The Summit was very successful, with approximately 1000 attendees from all over the country and perspectives from a wider audience than many conferences. Key takeaways were surprise to find out how little the public thinks about water and that Minnesota is far ahead of the curve.

BUSINESS ITEMS

1. MAWSAC Update

No update because the last TAC meeting was a joint meeting with MAWSAC

2. Water Supply Planning Data Challenges Presentations – Dave Brown, Metropolitan Council and Greg Kruse, MN DNR

Metropolitan Council - Dave Brown

Mr. Brown and Council staff presented information regarding the need for data and some of the challenges surrounding the collection of that data. Challenges include inconsistency of the data collected, format of the data collected, validation of the data and a lack of understanding about the questions being asked.

Presentation covered the following main topics to inform the group discussion

 Council responsible by statute for "developing and maintaining base of technical information for sound water supply decisions..."



- Master Water Supply Plan (MWSP) sets several desired outcomes.
- Data collection and analysis is required to track performance towards those desired outcomes.
- MWSP Goal to use less than 90 gallons per person per day by 2040 used as one example to highlight the data challenges
- o Data Consistency
 - Water use data is collected by several agencies. The information collected has changed over time.
- Data collection and entry
 - Historic data is in many formats including, paper, PDF and Microsoft Word and Excel. Much of the data has not been transferred from the various formats into a single electronic database.
 - Although templates are used for various documents that provide water data, the format of the templates allows people to leave values blank, add or delete data elements.
 - Little to no data validation rules when data is entered.
- Data quality how to improve
 - Understand the purpose and context of the data
 - Use a data dictionary for all data elements it's obvious many people don't fully understand what data should be entered.
 - Perform regular review of data to uncover anomalies
- Data quality the results of the 2017 MnDNR Water Conservation Report Data set provided for 7 county metro area.
 - 20 to 30% of several data types showed questionable or inaccurate data.
- Recommended that providing training would help public water suppliers improve the quality of data they provide.

Mn Department of Natural Resources - Greg Kruse

Mr. Kruse presented on the challenges surrounding data from the agency's perspective.

The presentation covered the following main topics to inform the group discussion:

- Reiterated the challenges with Water Conservation Data as presented in Dave Brown's presentation
- Provided maps showing the locations of groundwater monitoring wells in the metro area.
 Also provided animations showing the changes in groundwater levels in various aquifers over time in the metro.
- Working on building out groundwater monitoring network to better understand current conditions in real time.
- DNR needs funding to build out monitoring network, with focus on Prairie Du Chien aguifer.
- DNR is getting SCADA data from various cities, but it is expensive for cities and DNR to connect to that data. Requires multiple software platforms.

Mn Department of Health - Lih-in Rezania

Ms. Rezania was invited at the meeting to provide any perspectives that she or MDH has on the data issue. Following are some of her comments.

- MDH is seeing a great interest in more and different types of stakeholders wanting to see the data. Not just the raw numbers but turning values into visuals that tell stories.
- o Stakeholders have a desire to access data using mobile devices.

Comments by TAC, Council staff and audience members

- Frustration on part of municipalities of the cost of providing the data to DNR, particularly when it seems that the data is not being used.
- o Trust is a major factor, but it is improving between cities and agencies
- o Funds are always limited and there is competition for those funds.
- Staff turnover is a huge issue for building and maintaining trust and for understanding the data entry, collection and analysis
- **3. Data Challenges Discussion** Due to feedback from the members present, small group discussion was skipped in favor of jumping directly into large group discussion.

First exercise during group discussion was a "Question Burst". Lanya led this exercise which got people to share the questions that came up for them during the presentations. Intent was to get only questions and not solutions or answers. People had 4 minutes to share their questions, which are listed below. Lanya Ross and Dave Brown captured the questions on a poster.

Below are the questions raised during the Question Burst.

The prompt for people's questions was "Creating and maintaining data for sound water supply decisions"

NOTES ON QUESTION BURST POSTER

- What does trustworthy date look like?
- Who pays for it?
- What are the risks of supplying data to agencies?
- How to improve?
- Will it be used for compliance?
- Difference between public and private?
- How can we leverage technology?
- Are agencies required to use?
- Why not using the data we have?
- How do you create accountability?
- Who is it for?
- Can we agree on data definitions?
- Who will hold data and that it is trusted (agency)?
- How can it be accessed?
- How is technology considered?
- What data?
- How to share with users?
- How to know it's accurate?
- How to get people to contribute?
- What is vision for continual improvement?
- Why are we collecting it?
- How do you know it's accurate?
- Who's responsible to collect it?
- Who gets to tell the story? How many stories are there?
- How do you ensure uniformity?

• Share USGS water use report.

After Question Burst exercise, staff discussed options to address the data collection issues. One method would be for TAC to create a "White Paper". Staff gave high level overview of "White Paper" process. An outline of that process is shown below.

White Paper outline:

- Audience
- Problem
- Values
- Issues
- Options
- Recommendations
- Conclusions

Members provided input on the "White Paper" idea which are captured below.

NOTES FROM THE WHITE PAPER POSTER:

- What would be best way to address? White paper, guidance document or technical memorandum?
- Maybe Metropolitan Council could provide guidance document to public water suppliers
- Support public water suppliers with training module(s).
- Example topics to cover would be: data standards, protocols.
- Problem statement for white paper: Water is a quasi-renewable resource with costs that increase
- Possible title: The broken data system? Disconnected system?
- Business vs stewardship roles

Here are comments by TAC, Council staff and audience members during the discussion.

- A municipality expressed embarrassment that municipalities are not better at understanding and reporting data. Not sure how to address.
- Municipalities often use different values when reporting to different agencies for different reasons. For example, may internally use higher values when planning future water use but then provide more conservative values externally to planning or permitting agencies.
- Several members wanted to better understand how the two water use goals in the Master Water Supply Plan (MWSP) were determined and who decided on those specific numbers. None of the members knew the history or the basis for the residential water use goal of 75 gallons per person per day (gpcd) or the total water use goal of 90 gallons per person per day.
- These two MWSP goals generated a lot of questions and comments by TAC, staff and audience members.
 - o Why do we have targets for water use?
 - o How is it calculated?
 - o Is there a standardized formula?
 - o How do we define sustainability?

- o Why does sustainability matter?
- o What do we value? What are our values?
- O How do I explain to my City Council why the state has these water use goals and justify to them why those numbers were selected? What is the science behind these selections?
- o How do we standardize the data reported?
- Strong interest by everyone to fully understand the rationale behind the selection of the 75 and 90 gpcd goals.
- Risks for agencies collecting and then sharing data that winds up making someone look bad.
- Municipalities are in the business of selling water, so reducing water use results in decreased revenue and the need to increase rates. This creates a general conflict between selling water and being stewards of the water. Are members willing to act as Ambassadors for having these conversations and working towards solutions? Or providing input to the Legislative Water Commission?

Another exercise was used to further explore the question of gallons per person per day goals. Below are those notes.

NOTES FROM THE 5 WHYS POSTER:

- 1. Why do we have goals/targets for water use (75, 90 gpcd)?
 - a. People's money is spent chasing these numbers
 - b. Understand sustainability
 - c. What does it cost to get to these targets?
 - d. Do these targets protect other water uses? How to value them (other uses)?
- 2. Why does money matter? Or Why does our decision regarding sustainability matter?
 - a. Dollars are finite and competing with other needs.
 - b. Our decisions re: sustainability matter to reduce cost.
- 3. Why is the understanding that dollars are finite matter, and relate to life priorities? Why is it a sticking point?
 - a. Community trust
 - b. Sticking point because it may not represent all the value of water

Additional thoughts: Why is there no consistency in how goals are calculated? Is it defined (Met Council can summarize, TAC can review and provide input)? Explore options to collect/manage data?

4. Next Steps – Dave Brown, Metropolitan Council
Staff at the Council will prepare a draft document to capture ideas presented today, which will perhaps be shaped into a White Paper, Technical Memorandum, Guidance Document or Training Module.

NEXT TAC MEETING

Staff indicated that the next TAC meeting will be at New Brighton City Council Chambers on October 24, 2018 from 1 to 4 pm. An optional tour of the water system facilities is being considered immediately before the meeting. Additional information will be provided later.

ADJOURNMENT

Business completed, the meeting adjourned at 4:02 p.m.

Jinger Pulkrabek Recording Secretary

