Memorandum

DATE: May 10, 2021

TO: Wendy Wulff, MAWSAC Chair

FROM: Mark Maloney, TAC Chair

SUBJECT: Recommendations around water quality and contamination

This memo includes information for the Metropolitan Area Water Supply Advisory Committee (MAWSAC) to consider as the committee develops recommendations around water quality and contamination. It reflects past MAWSAC and Technical Advisory Committee (TAC) committee meeting discussions, recent interviews with a limited number of TAC and MAWSAC members, and internal MCES conversations.

Request to MAWSAC

Share your thoughts on what recommendations to make as a committee around water quality and contamination.

Background

The Metropolitan Area Water Supply Policy Advisory Committee (MAWSAC) is responsible to assist the Council in its water supply planning work. One of the committee's responsibilities is to produce, by 2022, a set of recommendations and supporting information around high-priority water supply topics to support the update of the regional development guide and related policy plans. The Metropolitan Area Water Supply Technical Advisory Committee (TAC) informs MAWSAC's work by providing scientific and engineering expertise. Recommendations to the Metropolitan Council (Council) and Minnesota Legislature (Legislature) may address technical studies, policy updates, collaboration, and/or funding.

In March 2021, MAWSAC and TAC adopted a work plan to develop recommendations in the areas of:

1. Contamination and water quality
2. Intersection between land use and water supply
3. Groundwater and surface water interaction
4. Infrastructure

TAC Meeting Highlights

At their meeting on April 20, 2021, TAC was asked to share information with MAWSAC to consider related to potential recommendations in the area of water quality and contamination, both current and emerging. This reflects MAWSAC's intention to approach the development of recommendations by working directly with local technical and scientific experts throughout the process to ensure their concerns are consistently understood and considered.

TAC provided input and suggestions to revising the draft problem statement, goal, and proposed actions on pages 3-5 below. They also shared the following high-level considerations:

- Funding is critical to include in the discussion and should be a high, if not the highest, priority for MAWSAC.
- Recommendation that point source contamination is outside of the Council's "swim lanes" and is best covered by other water agencies. However, nonpoint source contamination is really within Council's "wheelhouse", particularly related to land use, and worth pursuing.
- It is important that proposed approaches should not only recognize potential contaminant sources but also the nature and unpredictability of potential contaminants.

METROPOLITAN COUNCIL

RECOMMENDATIONS TO SUPPORT A SAFE WATER SUPPLY

Goal

MAWSAC and TAC would like all the region's communities to be prepared for new, emerging contaminants and empowered to continually work to provide a safe water supply. The MAWSAC, under advisement of the TAC recommends achieving this outcome and ensure a sustainable water supply, the Council and the State of Minnesota support a framework to maintain equitable, long-term, integrated water approaches developed collaboratively by communities, water utilities, and regulators. *In this context, "framework" is defined as the ideas, information, and principles that form the structure of a plan or process.*

Problem

There is always the potential of another contaminant emerging in our water supply. As a region, we are not always proactive or best prepared to prevent spread or be responsive when new sources of contamination are discovered.

As committees form recommendations around this challenge, look for opportunities to:

- Increase support for inter-jurisdictional coordination. Contamination does not follow the bounds of individual political entities, therefore we can and should put in place mechanisms that will allow communities to better monitor for emerging contaminants, respond more proactively in a more coordinated (less duplicative or contradictory) way, and communicate more clearly to residents and businesses so that they can trust their water supplies are safe and secure.
- Clarify roles and financial and logistic responsibilities for communities, regulators, and other involved entities.

Questions to consider

Consider the following questions in preparation for the meeting. The *Master Water Supply Plan* and *Thrive MSP 2040* outcomes, principles, and goals are a resource to draw on.

1) **Based on your experiences dealing with new water quality or contamination challenges, what trade-offs or tensions do you perceive that might shape public policy?** What regulatory pressures are you trying to balance?
2) **Based on your experiences dealing with new water quality or contamination challenges, what would have made you better prepared?** What is missing from current state agency response in addressing contaminants of emerging concern (CEC) and existing contamination issues? What information, plans, permits, technical and financial resources set us up to do more later? What would a readiness plan look like for communities, water utilities, and regulators?
3) **What is the level of consumer confidence in your community? Does everyone have access to good information about the safety of their water supplies and trust the utility's and agencies' advice about any steps they should take?** Are there differences in the level of trust among different groups? How can stakeholders be engaged early and often? What outreach approaches have been most effective?
4) **How could the Council and/or organizations represented on TAC help?** How could the region be better prepared to address CECs and other water quality issues?

Potential solutions or approaches

The following proposed solutions or approaches come from conversations had by MAWSAC, TAC, and Council staff. At their meeting on April 20, 2021 meeting, TAC spent some time reviewing, revising, and doing some preliminary sorting these proposed solutions according to ease of implementation and impact.

Financial support

Proposed action	Ease of implementation versus impact
a) State of Minnesota augments sources of funding for uncertainties such as contamination (examples: grant programs to communities and private well owners for CEC response, subregional feasibility assessments, plan development and projects that address unexpected events)	Relatively easy to implement with longer-term or bigger impact
b) Local governments leverage state and regional resources to expand water quality monitoring/assessment to fill gaps in information (example: increase participation in Minnesota Department of Agriculture Township Testing Program)	Relatively easy to implement with longer-term or bigger impact
c) State of Minnesota provides funding for private well testing to ensure equitable access to information about water quality across the region	Relatively hard to implement with longer-term or bigger impact
d) State of Minnesota provides framework and support for how different sized communities can fund water quality remediation efforts	Relatively easy to implement with medium-term or moderate impact
e) Council and partners support and leverage contamination prevention and mitigation programs (examples: Minnesota Technical Assistance Program -MnTAP, Council Tax Base Revitalization Account, other state resources for activities such as moving unlined landfills in source water areas)	Relatively hard to implement with medium-term or moderate impact

Outreach, engagement, and training

Proposed action	Ease of implementation versus impact
a) Council supports multi-community tabletop emergency response exercises	Relatively easy to implement with medium-term or moderate impact
b) Council, with partners, supports regional campaign about the value and quality of treated water provided by utilities with content customizable by communities (example: work with Minnesota Department of Health (MDH) and communities on language in consumer confidence reports)	Relatively easy to implement with more immediate or smaller impact
c) State of Minnesota connects with private well owners to encourage regular water quality testing (example: at point of sale or through well testing clinics with partners such as MN Well Owners Organization)	Relatively hard to implement with more immediate or smaller impact

Research

Proposed action	Ease of implementation versus impact
a) Council, with partners, develop an exploratory research framework to identify regional and/or subregional water quality patterns and trends, using an aggregate approach to monitor drinking water, wastewater, and surface water	Relatively easy to implement with longer-term or bigger impact
b) Council surveys to understand the implications of how the wide range of our region's citizens view their water	Relatively hard to implement with longer-term or bigger impact
c) Leverage technologies to better understand groundwater flow directions and impact of drawdown on fate and transport mechanisms	Relatively easy to implement with more immediate or smaller impact
d) Council, with subregional partners, evaluate interconnections (agreements, functionality, water quality issues, etc.)	Relatively easy to implement with more immediate or smaller impact
e) State of Minnesota, with local governments, enhances monitoring to identify and publish data re: the presence of key contaminants in drinking water supplies throughout the metro area (example: map of various monitoring, coded by if results exceed limits or not to help people better understand their risks)	Relatively hard to implement with more immediate or smaller impact

Regulatory

Proposed action	Ease of implementation versus impact
a) State of Minnesota, represented by state agencies like the Minnesota Pollution Control Agency (MPCA), MDH, Department of Natural Resources (DNR), with partners, invests in development of protocol/operating procedure for communities facing newly found contamination as well as responding to potential decreases in contamination limits, streamlining regulatory direction to communities	Relatively hard to implement with longer-term or bigger impact
b) Council and partners support and contribute to legislative recommendations (example: MAWSAC or TAC input to Legislative Water Policy Committee process to prioritize and promote issues)	Moderately easy to implement with medium-term or moderate impact
c) MPCA and MDH solicit input from MAWSAC and TAC re: rules and guidance on key water supply contaminants	Relatively easy to implement with more immediate or smaller impact

Regional policies and planning (Council and partners)

Proposed action	Ease of implementation versus impact
a) Council, with partners, explores forecasts that consider a range of future scenarios to support 2050 local comprehensive plan updates and longer-term water system options and alternatives guided by local needs and capabilities	Moderately easy to implement with longer-term or bigger impact
b) Council and partners pool collective expertise to address increasingly complex water problems that require a system's approach (example: integrated consideration of water supply, watershed management, wastewater system)	Relatively hard to implement with longer-term or bigger impact
c) Council, with partners, monitors and analyzes the quality of surface water, groundwater and wastewater – including CECs, as appropriate – to support the assessment and protection of the region's water resources (targeting Council-owned property management and system operations and priority waters)	Relatively hard to implement with longer-term or bigger impact

Information shared by TAC and MAWSAC committee members related to the topic of water quality and contamination

The following resources were shared or referred to during and after the March 23, 2021 MAWSAC-TAC workshop. They may be useful to review related to committee conversations around water quality and contamination. This is not intended to be a complete list of resources.

Nomination & Prioritization Research

- *MDH Contaminants of Emerging Concern (CEC) Program* (*13 min video*)
- *MDH Health Risk Limits*

PFAS

- *SWnewsmedia 'Forever chemicals' leaked into groundwater by local landfills (article)*
- MPCA "What are PFAS?" (*2 min video*)
- ECHA "How is the EU making sure PFAS chemicals don't stick around?" (*2 min video*)
- Clean Water Action "PFAS Chemicals are putting our health at risk" (*12 min video*)

Chloride

- U of M "The Changing Earth: Chlorides in Water" includes softeners, road salt, ag (*3 min video*)
- *MPCA Smart Salt Training Program* (*3 min video*)
- *MPCA library of statewide chloride resources*
- *PLOS ONE 'Centralized softening as a solution to chloride pollution' (2021 article)*

Groundwater monitoring data

- *MDH drinking water quality*
- *MDH consumer confidence reports*
- *MPCA groundwater quality data*
- *DNR groundwater level data*
- *MDA agricultural monitoring and assessment*
- *MC environmental information management system*

Community data

- *MC Community Profiles*
- *MC Rethinking Areas of Concentrated Poverty*
- *MPCA Understanding environmental justice*

Communication and engagement resources

- *MDH Drinking Water Risk Communication Toolkit*

Private well testing resources

- *MDH How to Test Your Well Water (1.5 min video)*
- *MDH Accredited Labs in Minnesota Accepting Samples from Private Well Owners*
- *Washington County Water Tests (services and fees)*
- *Dakota County Testing Well Water (testing and costs)*