

Information Item

Joint meeting of the Metropolitan Area Water Supply Advisory Committee and the Metropolitan Area Water Supply Technical Advisory Committee



Meeting Date: January 9, 2024

Topic

Summary of MAWSAC and TAC 2023 committee accomplishments and influence on water supply planning-related efforts

District(s), Member(s): All
Policy/Legal Reference: Minnesota Statute 473.1565
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Division/Department: Environmental Services, Water Supply Planning

Background

The Metropolitan Area Water Supply Advisory Committee (MAWSAC) is responsible for assisting the Metropolitan Council in its water supply planning work. MAWSAC's work is supported by the Technical Advisory Committee (TAC). The Metropolitan Council is updating various plans and documents and MAWSAC (with TAC input) had several opportunities over 2023 to lay the groundwork for and contribute to regional plan and policy formation.

This report provides examples (not a complete list) of how MAWSAC and TAC influenced the Metropolitan Council's regional development guide, Water Policy Plan, Metro Area Water Supply Plan, and other regional plans and projects in 2023:

- Providing input to legislative issues
- Providing input to regional planning efforts including the 2050 Water Policy Plan
- Providing guidance to draft updated content for and supporting a subregional approach to the update of the Metro Area Water Supply Plan
- Promoting projects that support the committees' recommendations

Providing input to legislative issues

Update to Clean Water Council

As a part of its Twin Cities metro area field tour on September 18, 2023, the Clean Water Council invited the Metropolitan Council to provide an overview of the Metropolitan Council's role in regional water management and how it has used Clean Water Funds. This presentation helped frame the two-day field tour for Councilmembers and add clarity for this state-wide body as to how Clean Water Funds make a difference for sustainable and clean water for future generations in the metro area. Additionally, the Metropolitan Council and the Minnesota Department of Health were invited to share an update about a collaborative pilot project for multi-community wellhead protection. The Metropolitan Council overview slides can be found on pages 48-88 of the [meeting packet \(PDF\)](#). The wellhead project presentation slides can be found on pages 133-143 of the [meeting packet \(PDF\)](#).

Members of the Clean Water Council expressed strong support for Metropolitan Council projects like the wellhead protection pilot project and the water efficiency grant program, both of which were identified by subregional water supply stakeholders and recommended by MAWSAC in their 2022

report to the Minnesota Legislature and Metropolitan Council. Both the collaborative pilot project for multi-community wellhead protection and water efficiency grants are supported by the Metropolitan Council's appropriation from the Clean Water Fund.

Update to Subcommittee on Minnesota Water Policy

On [December 5, 2023](#), the [Subcommittee on Minnesota Water Policy](#) invited the Metropolitan Council to share an [update on its water supply planning work](#), which has been guided by MAWSAC and TAC.

This presentation sparked legislators to focus on and ask about metro area water supplies, including:

- What new water supply issues and concerns do people in the metro area have?
- Are other areas of the metro (in addition to PFAS in the east metro) facing contamination issues?
- What is being done to explore changes in land planning, statutory changes, and/or other efforts so that we can better support reuse of wastewater as an option in the future?
- What is the Metropolitan Council's role in setting water use priorities? In investing in increased wastewater treatment to support future reuse of wastewater?
- When thinking about capital investment plans and funding, how to support improvements of water treatment plants in ways that also reduce chloride in downstream wastewater streams?

Providing input to regional planning efforts

Scenario planning to support high-level planning and policy exploration in the Regional Development Guide

In the summer of 2022 ([05/17/2022 MAWSAC meeting](#) and the [06/21/2022 TAC meeting](#)), MAWSAC and TAC were invited to provide input on a Metropolitan Council project to explore different implications of four planning scenarios (high, dispersed growth; high, compact growth; low, dispersed growth; and low, compact growth).

That input was combined with input from other advisory committees such as the Transportation Policy Plan Technical Working Group and the Water Advisory Group to flesh out the scenario narratives that were presented to policy makers in 2023. For example, the Metropolitan Council Committee of the Whole heard a presentation about the [Scenario Planning's Water Findings](#) on October 18th, 2023. A [video of the presentation is online](#) (starts at time 58:50; water supply-specific content starts at 1:26:05). This information is shaping the update of the Regional Development Guide (Imagine 2050) and the related regional and system plans.

Input to water policy research papers and 2050 Water Policy Plan update

Metropolitan Council Environmental Services staff developed a series of water policy research papers that investigate current and future water concerns in the metro area. These policy research papers are intended to share current understanding of issues, identify current policy connections or gaps, and to propose future policies and strategies to ensure sustainable water resources. The papers are informing Metropolitan Council's 2050 Water Policy Plan.

While water supply is not a regional system and is locally-controlled, it is a vital part of a holistic water planning picture. Metropolitan Council staff wanted to ensure that the local perspective was reflected in the content creation of the research papers. Content from past MAWSAC committee work efforts helped to inform the initial selection of water policy research paper topics at the beginning of the project and have been continual guiding resources as Council staff authored the papers. Members that sit jointly on MAWSAC or TAC and the Water Advisory Group – Scott Anderson, Mark Maloney, Patrick Shea, and Brue Westby – assisted in reviewing the policy research papers.

Jen Kostrzewski and Judy Sventek presented about the Water Quality and Protecting Source Water Areas policy research papers at the [April 11, 2023 TAC meeting](#) and at the [May 9, 2023](#)



[MAWSAC meeting](#) and shared the Water Reuse and the Water Availability, Access and Use policy research papers at the [July 11, 2023 TAC meeting](#) and at the [August 8, 2023 MAWSAC meeting](#).

Committee members provided input on the research papers that were shared with the 2050 Water Policy Plan authoring team.

TAC also provided input on draft 2050 Water Policy Plan objectives at their meeting on [October 10, 2023](#). Feedback was shared with the 2050 Water Policy Plan authoring team.

Guiding the update of the Metro Area Water Supply Plan

Drafting updated content for the Metro Area Water Supply Plan

In 2023, committee work on the updated Metro Area Water Supply Plan focused on:

- Identifying additional content to include in addition to what was drafted for Chapter 1 in 2022 and will be drafted for subregional chapters in early 2024. Specifically: regional commitments and regional dashboard measures.
- Aligning the water supply plan structure and terminology with the evolving 2050 Water Policy Plan so that they support one another

At the [MAWSAC meeting on May 9, 2023](#), the committee heard a summary of the March 15, 2023 workshop of subregional water supply work groups. This included local feedback on the MAWSAC and TAC water supply goals identified in 2022 and perspectives about shared concerns and project ideas. MAWSAC also considered policy research papers. Metropolitan Council staff used MAWSAC input to revise the draft outline for the Metro Area Water Supply Plan.

At the [TAC meeting on July 11, 2023](#) and the [MAWSAC meeting on August 8, 2023](#), the committees considered a revised draft outline for the Metro Area Water Supply plan. The revised outline included a new chapter for regional commitments, based on a summary of regional challenges and strategies identified in the 2022 report and at the March 15, 2023, workshop of subregional work group participants. MAWSAC and TAC members also shared ideas for a chapter of regional dashboard measures, building on input from the March 15th workshop.

At their meeting on [October 10, 2023](#), TAC considered the proposed revision of the Metro Area Water Supply Plan and its connection to the 2050 Water Policy Plan. Group discussion focused on refining potential regional dashboard measures that were identified by MAWSAC and TAC in July and August.

The committee discussions in 2023, combined with the subregional engagement in late 2023 and early 2024, will generate a complete draft of the updated Metro Area Water Supply Plan for MAWSAC and TAC to review and revise in the first quarter of 2024.

Supporting subregional approach to engagement and content development for the updated Metro Area Water Supply Plan

In its [2022 report](#) to the Minnesota Legislature and Metropolitan Council, and in subsequent meetings, MAWSAC and TAC have supported “establishment of a new subregional water supply planning approach that leverages subregional water supply working groups and informs regional and local policy and plan updates.”

With MAWSAC and TAC’s guidance, Metropolitan Council water supply planning staff drafted a proposed approach to subregional engagement that was shared with local water supply stakeholders from across the region at a [workshop on March 15, 2023](#). The proposal for a subregional approach was confirmed.

Over the summer, subregional boundaries were determined, core teams of Metropolitan Council staff and local leads were established, and workshops were designed and scheduled.

As of December 19th, 2023, subregional workshops have been held in the east, southwest, and west metro. The workshops have generated subregionally-specific information about what successful water supply planning looks like for the subregion, challenges and opportunities, and

preferred strategies.

Approximately 60 people have participated so far in the workshops and additional people have provided input through related surveys and interviews. MAWSAC and TAC members who have participated include: Mike Huang, Valerie Neppl, Pat Shea, Scott Anderson, Robert Ellis, and Jim Westerman.

Additional workshops are scheduled for January and early February 2024 in the central, northeast, northwest, and southeast.

Subregional input will shape the subregional chapters of the updated Metro Area Water Supply Plan as well as ongoing collaboration.

Metropolitan Council water supply planning-related projects

In 2023, Metropolitan Council worked with various partners to advance several projects that were recommendations in the [2022 MAWSAC report](#):

Regional Water Demand Projections

Because understanding water demand is strongly connected with MAWSAC's principles, goals, and planning approaches, Metropolitan Council staff proposed an updated method to project total water demand for the Twin Cities Metropolitan Area for municipal groundwater and surface water systems and private wells. The total water demand in the metro region includes demands from municipal water systems (surface water and groundwater systems), private high-capacity wells, and private residential water wells.

While the work is being done specifically in support of the regional Metro Area Water Supply Plan update, it may also be useful to communities as they do their own planning work.

MAWSAC was introduced to and provided input on the proposed approach at their [August 8, 2023](#) meeting. A revised approach was shared with TAC for input at their meeting on [October 10, 2023](#). Committee input will continue to be solicited in spring 2024.

Twin Cities Region Water Supply Planning Atlas

In the [2022 report](#), MAWSAC and TAC recommended “pooling expertise and relationships among subregional workgroups, wellhead managers, land use planners and developers, and watershed management organizations to address increasingly complex water problems that extend outside their jurisdictions and require a systems thinking approach” and “creating and promoting a regional campaign for local decision makers and residents with educational material and customizable content” and “supporting the use of Metropolitan Council’s Local Planning Assistance program’s resources for community planners and public water suppliers” (Table 1, rows A.1, A.10 and D.9). This recommendation is built on a common and repeated request from local water supply stakeholders across the region for a source of water supply information to support their work.

The [Twin Cities Region Water Supply Planning Atlas](#) compiles water supply and land use data and information for the region. The atlas is intended to inform planning conversations at the regional and subregional level and serve as a collaboration, outreach, and education tool.

Version 1 of the atlas has been shared with stakeholders in fall 2023 to support water supply stakeholder outreach and engagement.

This resource is available to help inform multiple projects including, but not limited to, the update of the Metro Area Water Supply Plan (specifically subregional chapters).

Currently, the atlas presents data through the calendar year 2021. Atlas information can only be updated as the data is made available and as staff have time and resources to process and analyze it. The atlas may be updated in the spring of 2024 with 2022 appropriation permit data and again in the fall of 2024 with data from 2023. Staff also aim to expand the atlas content to include non-municipal permits and other information, to be more inclusive of the entire water supply picture.



Multi-Community Wellhead Protection Planning Pilot in the West Metro

In the [2022 report](#), MAWSAC and TAC recommended “subregional support for multi-community planning of infrastructure and source water protection projects, where challenges and benefits extend beyond political boundaries of one community” and “subregional work groups collaborate with MDH and others to recommend ways to streamline wellhead protection plan update process and encourage communities with overlapping DWSMAs to work together through Minnesota Rules” (Table 1 rows D.1 and D.3).

Over the years, stakeholders in the west metro expressed interest in working together on shared wellhead protection planning and so Metropolitan Council, MDH and west metro water supply stakeholders have been working on a [pilot project](#).

Delineation and vulnerability assessment work was completed in winter 2023 (with Barr Engineering Co.). In 2024, work will begin on Phase 2: shared implementation planning.

Expansion of research on The Value of Water in the Twin Cities with the University of Minnesota

In the [2022 report](#), MAWSAC and TAC recommended “engaging communities to understand residents’ water values, to better understand the implications of the wide range of our region’s citizens view their water and to support more targeted and effective outreach” (Table 1, row A.8).

In line with that recommendation, Metropolitan Council expanded a research project with the University of Minnesota to reach more people and ensure that the culturally diverse range of metro area perspectives is included in the work. When policy makers, agency officials, water professionals, and community members are better informed about the cultural values of water and the value tradeoffs of water decisions, decisions become more transparent, decision makers are more accountable, and outcomes are more socially just. Project findings can inform water planning and policy across the Twin Cities Metropolitan area – from water supply to water treatment to stormwater management.

Continuation of Industrial Water Conservation with the Minnesota Technical Assistance and Intern Program

In the [2022 report](#), MAWSAC and TAC recommended “identifying and evaluating existing and potential mitigation measures that could help reduce the risk of identified hazards and hazardous events” including “expanding technical studies with U of M on the effectiveness of current and past water efficiency practices (turfgrass, industrial, and commercial practices).”

Following that recommendation, Metropolitan Council continues a successful, collaborative partnership with the Minnesota Technical Assistance Program (MnTAP) at the University of Minnesota, working together to address the metro-area need for industrial sector water use efficiency awareness and water use reductions. This includes MnTAP technical assistance and the MnTAP Intern Program to assist businesses with identification and implementation of water efficiency projects.

Since the partnership began, MnTAP has worked with numerous operations in the metro providing a range of practical suggestions to improve industrial water efficiency. Since 2013, MnTAP, with Metropolitan Council support, has made approximately 300 water efficiency recommendations representing potential annual water savings of around 500 million gallons per year. Implemented recommendations as of 2022 total about 160 million gallons per year.

Continuation of Partnership with University of Minnesota Turfgrass Science Program

In the [2022 report](#), MAWSAC and TAC recommended “identifying and evaluating existing and potential mitigation measures that could help reduce the risk of identified hazards and hazardous events” including “expanding technical studies with U of M on the effectiveness of current and past water efficiency practices (turfgrass, industrial, and commercial practices).”

Following that recommendation, Metropolitan Council continues to partner with the University of Minnesota Turfgrass Science Program.



Examples of some of the work sponsored by the Metropolitan Council that the University of Minnesota has done include:

- Outreach by [Lawn Water Conservation Educator Gary Deters](#) and [Master Gardener Kim Sullivan](#)
- [An exhibit at the Minnesota State Fair](#) on smart watering practices and other low-input lawn care practices
- [Turfgrass responses to drought study](#) conducted by Jillian Turbeville
- [Irrigation Efficiency Educational Trailer](#), which promoted WaterSense-labeled irrigation controllers and visited over a dozen neighborhoods, fairs, and events

In October 2023, the U.S. Environmental Protection Agency’s [WaterSense](#) program recognized the Metropolitan Council with an Excellence in Promoting WaterSense Labeled Products Award for supporting the turfgrass trailer which promoted WaterSense-labeled irrigation controllers.

To learn more, please visit the University of Minnesota’s [Irrigation Resources page](#).

Continuation of the Water Efficiency Grant Program

In the [2022 report](#), MAWSAC and TAC recommended the “regional creation of grants for communities to support water efficiency and reuse programs or projects” in their 2022 report to the Minnesota Legislature and Metropolitan Council (Table 1, row D.7).

This recommendation builds on and commits to continuing strong support by and for local water supply stakeholders.

In 2023, Metropolitan Council continued to administer a Clean Water Fund-supported [water efficiency grant program](#) that provides grants to communities to support the purchase and installation of products that reduce water use.

37 communities are participating in the 2022-2024 program; they were awarded a total of \$997,920. Since the program started in 2016, it has incentivized the replacement and assessment of water-using devices with more than 15,000 water-efficient alternatives through city and township programs which, when implemented, save more than 200 million gallons of water each year.

In October 2023, the U.S. Environmental Protection Agency’s [WaterSense](#) program recognized the Metropolitan Council with an Excellence in Promoting WaterSense Labeled Products Award.

Three Plans Coordination

Water supply stakeholders have repeatedly requested more agency coordination and streamlined or consolidated planning processes. Minnesota Statutes 473.1565 charges MAWSAC and TAC to assist the Metropolitan Council with planning activities that include making recommendations for clarifying the appropriate roles and responsibilities of local, regional, and state government in metropolitan area water supply and for streamlining and consolidating metropolitan area water supply decision-making and approval processes.

Minnesota Departments of Health (MDH) and Natural Resources (DNR) and Metropolitan Council (MC) are all responsible for supporting the region’s diverse water supply stakeholders. One of the primary ways these organizations do this is by directing communities and public water suppliers to develop and implement local plans that sustainably manage water supplies. Each organization has a different focus, different planning timelines, and different staff and financial capacities, but all are closely related.

In 2023, DNR, MC, and MDH began an effort to set a clear vision for what DNR, MC, and MDH can do together through their local planning responsibilities to secure a safe and sustainable water supply—for today and for future generations. In addition to a shared vision, this effort will also clarify roles and functions for each organization and establish a structure to ensure coordinated local planning efforts.

A steering team has been established and a working group of staff from all three agencies has been convened and started work. MAWSAC and TAC will provide input to this effort in 2024.

