Chapters One and Two
Updated Metro Area Water Supply Plan

METROPOLITAN COUNCIL

Water Supply Technical Advisory Committee | July 11, 2023 | Lanya Ross

Goals for today

Topics

- TAC action requested
- Overview of complete plan content (draft)
- Chapter one status
- Chapter two status
- Next steps

TAC action requested

Review draft chapters

- Review as an individual committee member and share comments with Council staff
- Share with your organization and partners, with the goal of getting input to share with the Council – to ensure that you feel comfortable supporting the final draft.

Is there enough detail? Do we need to include more? Should anything be revised or deleted?

Provide input on measures

What kinds of information would you look for to understand progress towards each goal over time?

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Reminder of Metro Area Water Supply Plan content (draft)

Part 1
Vision & Goals (Desired Outcomes)

- Rational and approach to regional planning
- Regional desired outcomes with 2050 water supplies in mind

Part 2
### Context

- Regional summary of information that provides context for water supply planning, describes the current state of sustainable water supply practices, and supports the development of measurable and trackable regional targets

Part 3
Subregional Info

- Subregional information related to water, land use, and other factors
- Key water supply issues, risks and opportunities identified by stakeholders
- Implementation needs (high-level)
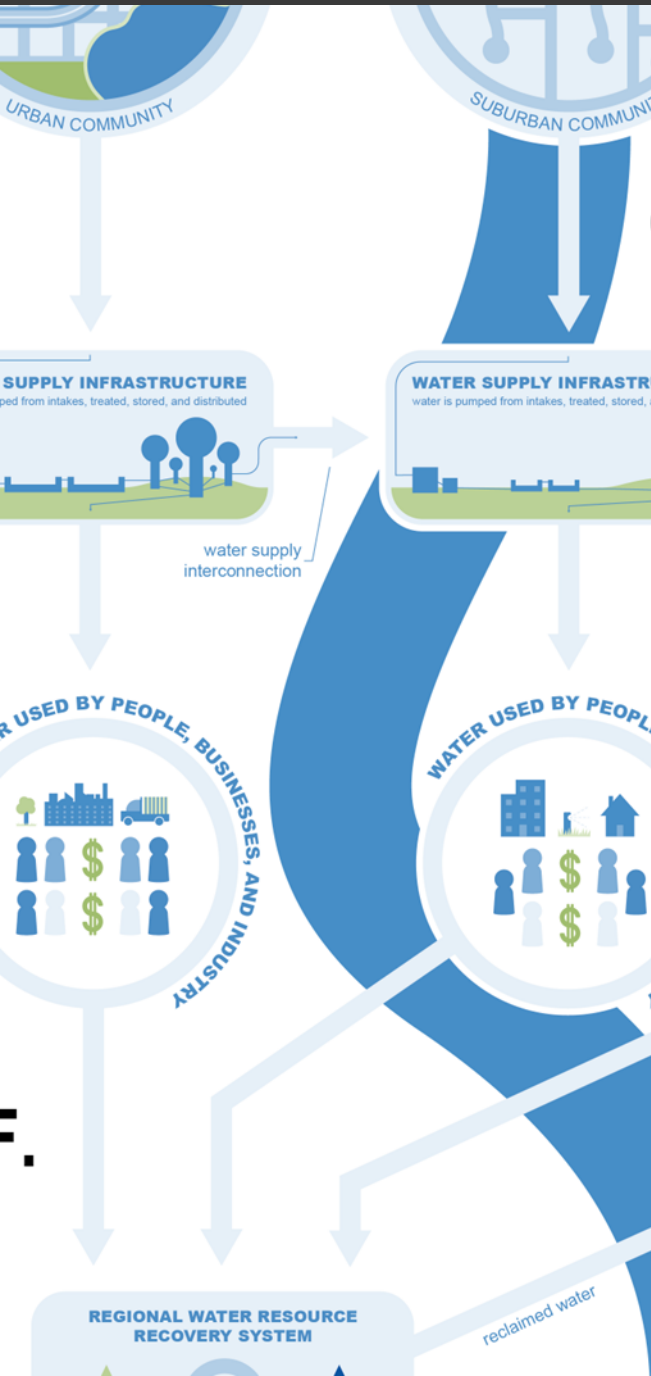
Minor changes since 12/20/22 draft based on input

- From MAWSAC and TAC at joint meeting in December 2022

- From subregional work group members at workshop in March 2023

- Revisions:
  - Shift in terms to be consistent with Met Council Regional Development Guide and Water Resources Policy Plan terminology. Vison/goal/objectives now desired outcomes.

  - Clearer acknowledgement that the Metro Area Water Supply Plan is connected and part of to the Water Resources Policy Plan. **MAWSAC is still the approving body.**

  - Minor text changes.

Introducing first draft of chapter two

Input and considerations

- MAWSAC and TAC: 2022 report and December 2022 joint meeting

- Subregional work group members: March 2023 workshop

- Call for measurable outcomes, metrics for tracking high-level regional progress

- Request to highlight region-wide challenges and strategies

- Benefit of providing concise, high-level context to engage state, regional and local leaders and residents. More detail available through resources such as Water Supply Planning Atlas.

- Connection to and consistency with developing regional policies

Proposed chapter two content

High-level summary providing regional context

- Regional water supply setting
    - What is the impact and scale of water supply management in the region?
    - What do we use water for in the region?
    - How much water do we use for those different purposes?
    - Where does our water come from?
    - What are limits of our water sources?
    - What is the infrastructure that connects sources to users?
- Regional challenges
- Regional strategies
- Regional dashboard measures to frame progress

Chapter two will refer readers to more detailed information in the Water Supply Planning Atlas as appropriate.
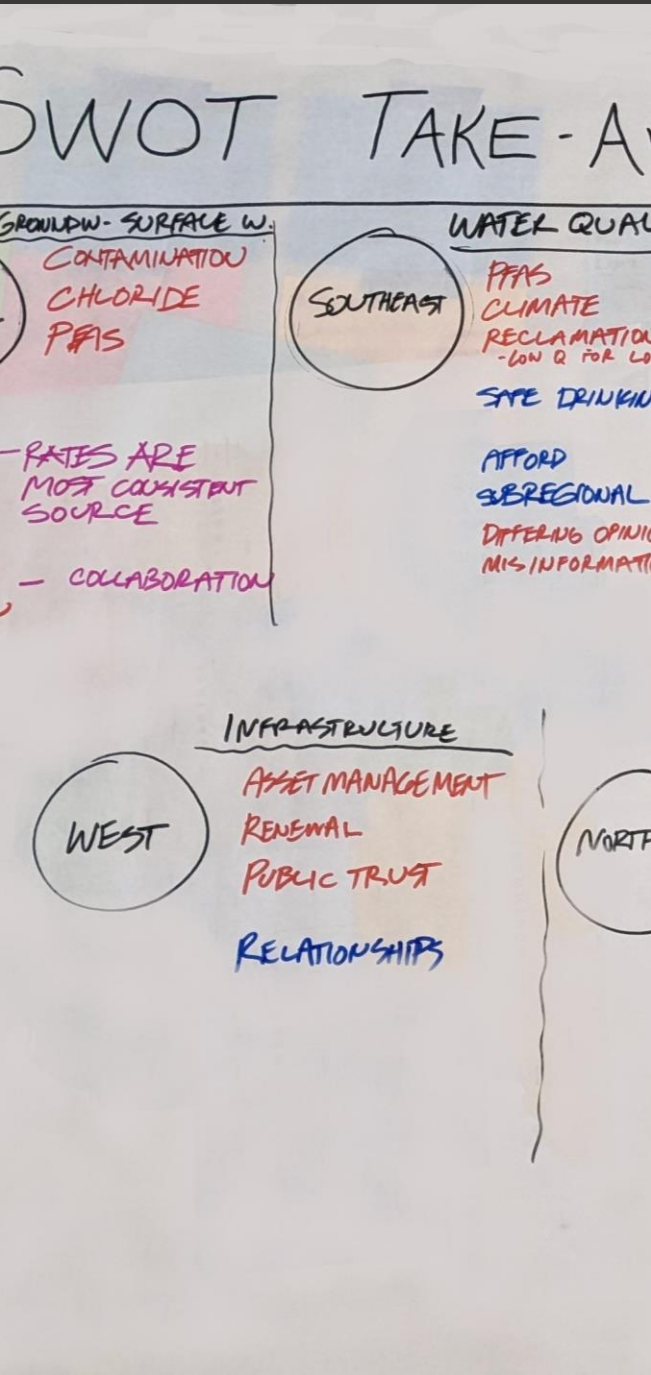
Regional challenges

- Current and future climate
- Water demand impacts of development and redevelopment
- Water quality impacts of development and redevelopment
- Workforce impacts of changing economy and demographics
- Finance and investment needs and opportunities

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- Support for subregional collaboration for water plan development and implementation,
- Support for regular multi-community emergency response training
- Region-wide communication plan for science, impacts, solutions, and funding timelines
- Support technical studies to fill regional gaps in the state's water supply-related datasets
- Support regional water balance modeling, surface and groundwater availability analyses
- Support regional water demand projections (including scenarios)
- Enhance MCES water monitoring program to better support regional water supply planning
- Regional water supply risk assessment to identify areas for enhanced mitigation measures
- Feasibility and cost benefit of enhancing stormwater reuse
- Support multi-community concept-level analyses of long-term water supply alternatives
- Develop a regional emergency response plan template
- Support water supply system asset management planning
- Develop inter-agency local comprehensive and water supply plan review standards
- Support water efficiency outreach and incentives through grants and partnerships

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Example graphics to support chapter two content (to be updated with input)

What messages are most important to convey to mayors and city councils, legislators, other decision-makers and influencers?

SEVEN-COUNTY METRO AREA
2020 POPULATION:
3.2 MILLION

2050 POPULATION:
+ 800,000

181 COMMUNITIES
- urban
- suburban
- rural & agricultural
- rural towns

MUNICIPAL WATER UTILITIES:
100+

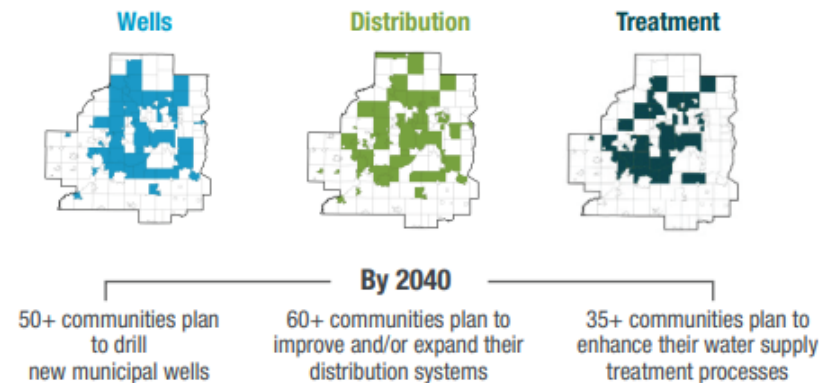**PRIVATE WELLS:**
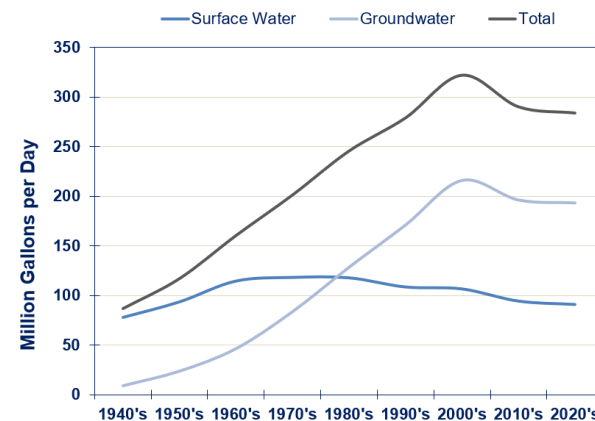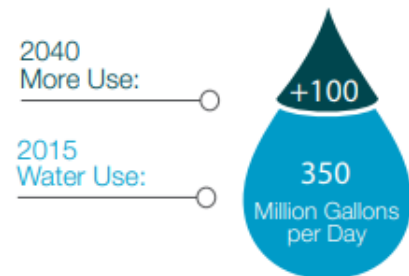60,000+

DISTRIBUTION PIPES:
10,000+ MILES

1 PERSON
120 GALLONS
24 HOURS

PLANNED INFRASTRUCTURE THROUGH 2040

Wells | Distribution | Treatment

By 2040

50+ communities plan to drill new municipal wells

60+ communities plan to improve and/or expand their distribution systems

35+ communities plan to enhance their water supply treatment processes

PROJECTED WATER USE

2040 More Use: +100

2015 Water Use: 350 Million Gallons per Day

— Surface Water — Groundwater — Total

Million Gallons per Day

1940's 1950's 1960's 1970's 1980's 1990's 2000's 2010's 2020's

OUR SOURCES OF DRINKING WATER:

Mississippi River only –
6 cities, about 520,000 people

Groundwater only –
162 cities and townships, about 2,080,000 people

Combined sources –
13 cities, about 550,000 people

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Considering regional dashboard measures to frame progress

A sustainable water supply for the entire region, now and in the future, is possible when:

The Met Council and its partners focus on improving outcomes in key areas.

This is advanced by:

- Enhanced collaboration and capacity
- System assessment
- Evaluation of mitigation measures
- Planning and implementation

Success in the region might be tracked using:

Available or new measures:	Investments	Actions	Outcomes

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Draft dashboard measures: Investments

Could successful investment in the region be tracked with:

A. Amount of state funding for regional and subregional water supply planning and implementation

B. Amount of Council investment in partnerships to reuse reclaimed wastewater

C. Partnership/collaboration on legislative efforts and funding recommendations

Draft dashboard measures: Actions

Could successful action in the region be tracked with:

A. Number of partners participating in Council-facilitated water supply work groups and events

B. Record of planning guidance provided, including workshops, presentations, planning tools provided, and other related information

C. Current state of sustainable water supply practices

D. Approved community comprehensive plans are consistent with Council policy and align with state water supply goals

E. Local comprehensive plan amendment impacts on approved community comprehensive plans

F. Number of wells sealed in wellhead protection areas

G. Planning and zoning controls for wellhead protection and recharge areas

Draft dashboard measures: Outcomes

Could successful outcomes in the region be tracked with:

A. Customer confidence and satisfaction
B. Water treatment effectiveness
C. Available [municipal water system] capacity
D. Number of private wells drilled
E. Regional average total municipal water use per person
F. Regional ratio of summer to winter monthly municipal water use
G. Regional average residential water use per person
H. Total water use (groundwater, surface water, stormwater reuse, and combined)
I. Trend in groundwater observation wells and piezometers
J. Water quality trends
K. # Communities participating in Council water supply-related incentive programs
L. Number of water supply system partnerships for maintenance and emergency back-up
M. Land use change in recharge areas

TAC input requested: Water supply infrastructure

What kinds of information would <u>you</u> look for to understand progress over time?

Communities can act quickly, thoughtfully, and equitably to address aging infrastructure, contamination, changing groundwater conditions, changing water demand, and financial challenges.

Investments?   **Actions?**   **Outcomes?**

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Water quality

What kinds of information would <u>you</u> look for to understand progress over time?

Communities have the resources they need to provide a safe water supply. A shared process is developed that allows communities, water utilities, and regulators to respond in a more coordinated and effective way to both contaminants of emerging concern and existing contamination.

Investments?   **Actions?**   **Outcomes?**

Land use and water supply connections

What kinds of information would <u>you</u> look for to understand progress over time?

Communities have the resources they need to provide a safe water supply. A shared process is developed that allows communities, water utilities, and regulators to respond in a more coordinated and effective way to both contaminants of emerging concern and existing contamination.

Investments?   **Actions?**   **Outcomes?**

Groundwater and surface water interactions

What kinds of information would <u>you</u> look for to understand progress over time?

Water resource managers, community planners, and leaders understand how groundwater and surface water interact and how those interactions impact water supply sustainability.

Investments?   **Actions?**   **Outcomes?**

Sustainable water quantity

What kinds of information would <u>you</u> look for to understand progress over time?

Communities and water agencies understand the sustainable limits of groundwater and surface water sources. Agency directions are aligned and support local plans to supply demand that exceeds sustainable withdrawal rates using the most feasible combination of alternative groundwater or surface water sources, conservation, reclaimed wastewater and stormwater reuse.

Investments?   **Actions?**   **Outcomes?**

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Overall process timeline and next steps

Upcoming work:
- Share draft and TAC discussion highlights with MAWSAC in August
- Revise draft content based on MAWSAC, TAC and Council staff input
- Summer engagement to support subregional chapters
- TAC and MAWSAC input to water policy development and projects
- Development and approval of Metro Area Water Supply Plan

Thank You

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