

Report from the Metropolitan Area Water Supply Advisory Committee

Recommendations for Water Supply Planning in the Metro Area

April 22, 2022

Subcommittee on Minnesota Water Policy



MN Statutes 473.1565:

METROPOLITAN AREA WATER SUPPLY PLANNING ACTIVITIES; ADVISORY COMMITTEES

By February 15, 2017, and **at least every five years thereafter**, the policy advisory committee shall report to the council, the Legislative Water Commission, and the chairs and ranking minority members of the house of representatives and senate committees and divisions with jurisdiction over environment and natural resources with the information required under this section.

The policy advisory committee's report and recommendations must include information provided by the technical advisory committee.

Working Together

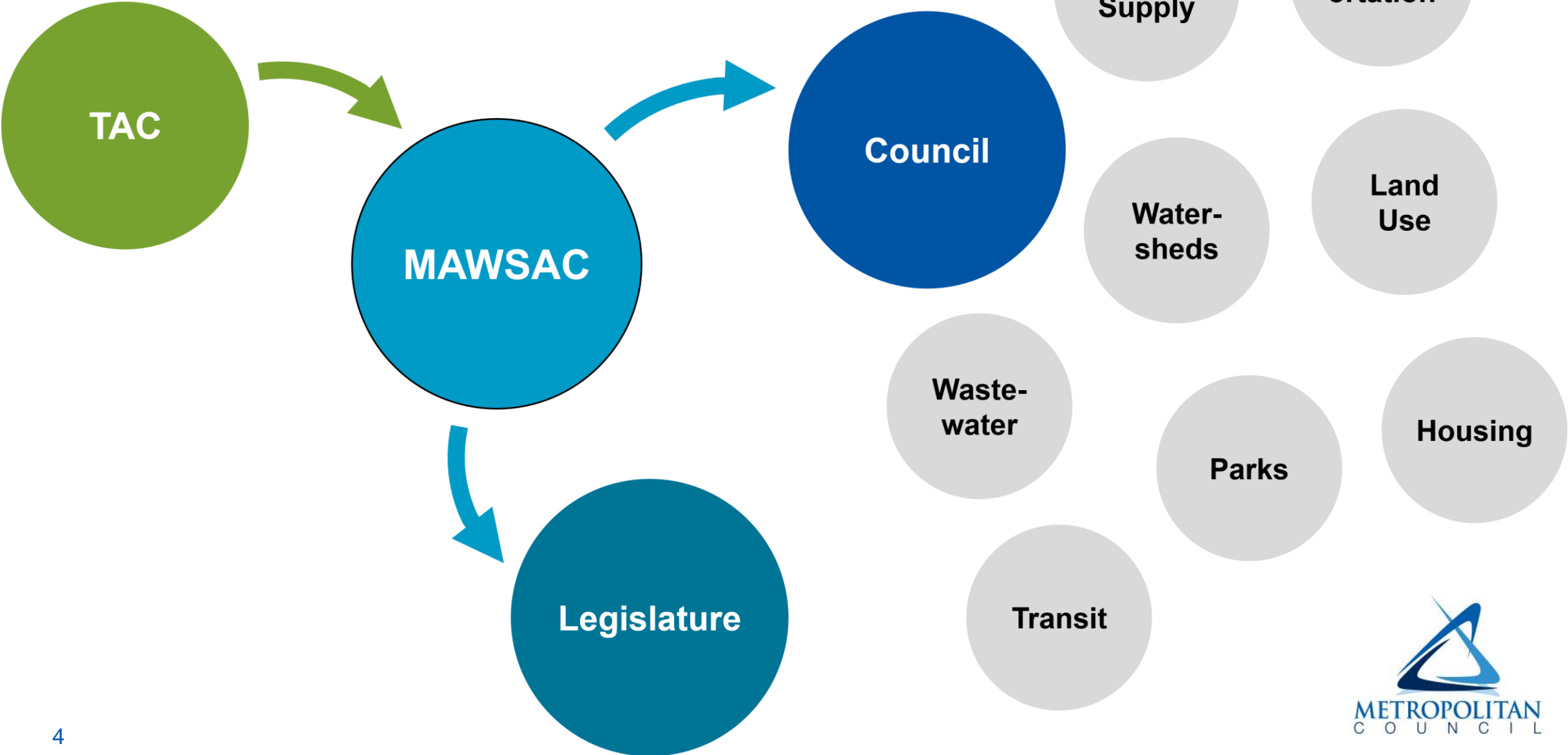


Metro Area Water Supply Advisory Committee (MAWSAC)

- Informs the Council's water supply planning activities and preparation of its regional development framework
- Pools collective expertise to address increasingly complex water problems that need a collaborative approach

- MAWSAC and TAC are unique resources the Council can tap for water supply planning expertise and partnerships
- State and regional policies and funding investments will benefit from the information in this report

Roles and responsibilities



Vision: Regional water supply sustainability



**Maximize use
of existing
infrastructure**



**Offset demand with
efficiency and
conservation**



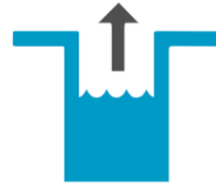
**Balance multiple
water sources to
meet demand**



**Align agency
directions**



**Recognize
uncertainty and
minimize risk**



**Maintain
groundwater
levels**



**Prevent
groundwater
contamination
spread**



**Protect surface
water flows**

Consider the following:

- Funding is needed for public water suppliers' and partners' emergency responses.
- Communities across the region need and are seeking funding for proactive infrastructure upgrades and expansion.
- Coordination across political boundaries is critical, because water moves freely between communities and one community's water supply decisions will impact others.
- Proposals have the most impact when they can advance multiple goals at once, recognizing the nexus between water quality, land use, groundwater-surface water interaction, and water supply infrastructure.
- Look for opportunities to remove regulatory barriers to help advance our goals for the region.
- Request information from water utilities and resource managers to craft the most effective legislation.

Focus Area Goals

- 1. Water Quality:** 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.
- 2. Land Use and Water Supply Connections:** Public water suppliers, land use planners, and developers have tools and are empowered to work together to guide and support development in ways that balance communities' economic needs while protecting the quantity and quality of source waters that are vital to the region's communities.
- 3. Understand and Manage Groundwater and Surface Water Interactions:** Water resource managers, community planners, and leaders understand how groundwater and surface water interact and how those interactions impact water supply sustainability.
- 4. Water Supply Infrastructure:** Communities can act quickly, thoughtfully, and equitably to address aging infrastructure, contamination, changing groundwater conditions, changing water demand, and financial challenges.

Framework for Action



COLLABORATION AND CAPACITY BUILDING

1. Engage leaders
2. Connect to technical experts
3. Build capacity



SYSTEM ASSESSMENT

1. Describe, document and diagram
2. Assess hazards
3. Characterize risk



MITIGATION MEASURE EVALUATION

1. Identify and evaluate mitigation measures
2. Reassess and prioritize risks



PLANNING AND IMPLEMENTATION

1. Establish subregional planning approach
2. Target regional guidance and incentives
3. Better prepare for the unexpected
4. Support local planning and implementation
5. Check outcomes and adapt to continuously improve

Reflecting Local Perspectives

Cleanup of existing pollution and water contamination is needed and costly. Can federal dollars be available for cleanup activities?

Let's learn from the drought this year. How can we better prepare for next time? Can we have better alignment between drought plans and water supply plans? State and local levels.

Chloride is still a big issue.

Need for water reuse, both wastewater and stormwater.

Staffing is an issue. The pool of qualified candidates is small.

We need more interagency collaboration to improve submittal requirement redundancy, pool knowledge, not duplicate efforts, and have strength in numbers.

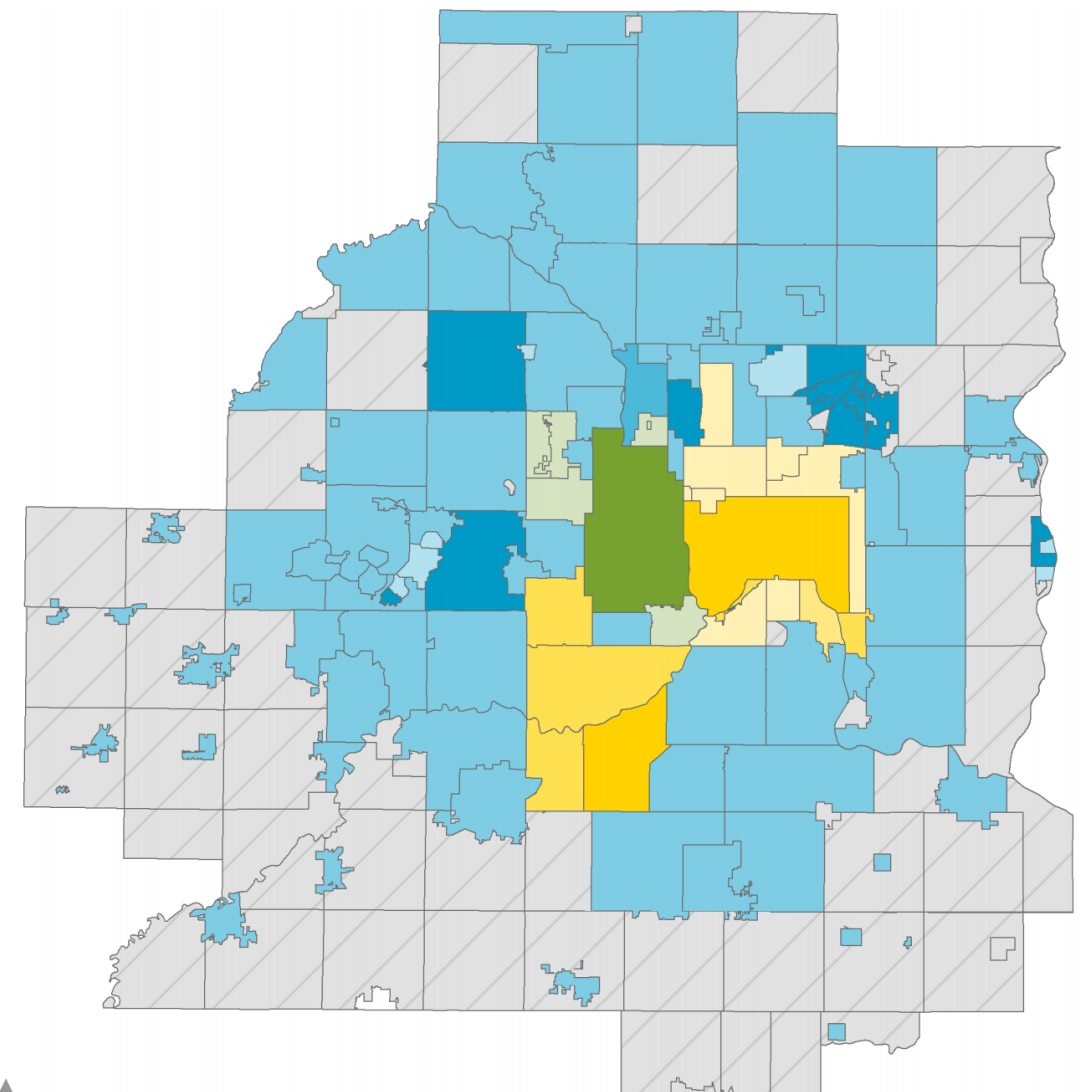
Aging infrastructure is a huge, costly issue. Funding is needed to maintain systems. It is easier to get funding for new infrastructure than repair of existing, aged infrastructure.

Activities to address challenges and achieve goals in priority focus areas

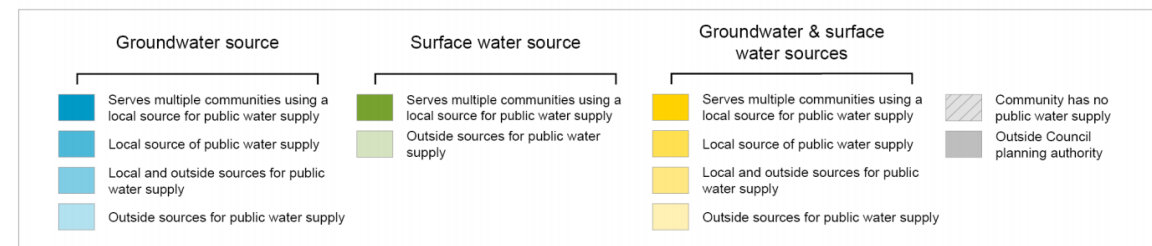
<p>Complete list of recommendations considered by MAWSAC and TAC in 2021</p> <p>#</p>	<p>Highlighted Funding Need</p>	<p>Water Quality</p>	<p>Land Use & Water Supply</p>	<p>Groundwater-Surface Water Interaction</p>	<p>Water Supply Infrastructure</p>
<p>C. Mitigation Measure Evaluation</p>					
<p>1. Document benefits and drawbacks for water supply infrastructure from redevelopment versus new development in the metro area.</p>			<p>✓</p>		<p>✓</p>
<p>2. Research to quantify how different land uses and development practices impact source water areas, water supply.</p>		<p>✓</p>	<p>✓</p>		<p>✓</p>
<p>3. Identify and recommend opportunities to increase funding and outreach for agricultural practices to protect source water.</p>	<p>\$</p>	<p>✓</p>	<p>✓</p>		
<p>4. Analyze and create maps of areas where development should be guided for water supply sustainability. Example maps may include source water protection and availability challenges caused by the intersection of groundwater, geology, topography, infrastructure, current and future development density, water storage, etc.</p>		<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>
<p>5. Identify and recommend opportunities to increase incentives for communities to conserve natural lands or shift land use to protect source waters, to help offset tax revenue that may be lost on conserving versus developing land. Example: fund investigation and programs to move unlined landfills out of source water areas.</p>	<p>\$</p>	<p>✓</p>	<p>✓</p>		
<p>6. Identify and recommend opportunities to fund grants or other incentives for communities that are prioritizing redevelopment and high-density housing. Example: Metropolitan Council Livable Communities Grants.</p>	<p>\$</p>		<p>✓</p>		

Community water sources

- Water supplies:
 - Over 100 different public water utilities
 - 60,000 private wells
- Local control and responsibility for water supply.
- Where challenges extend beyond local boundaries, regional efforts can help.

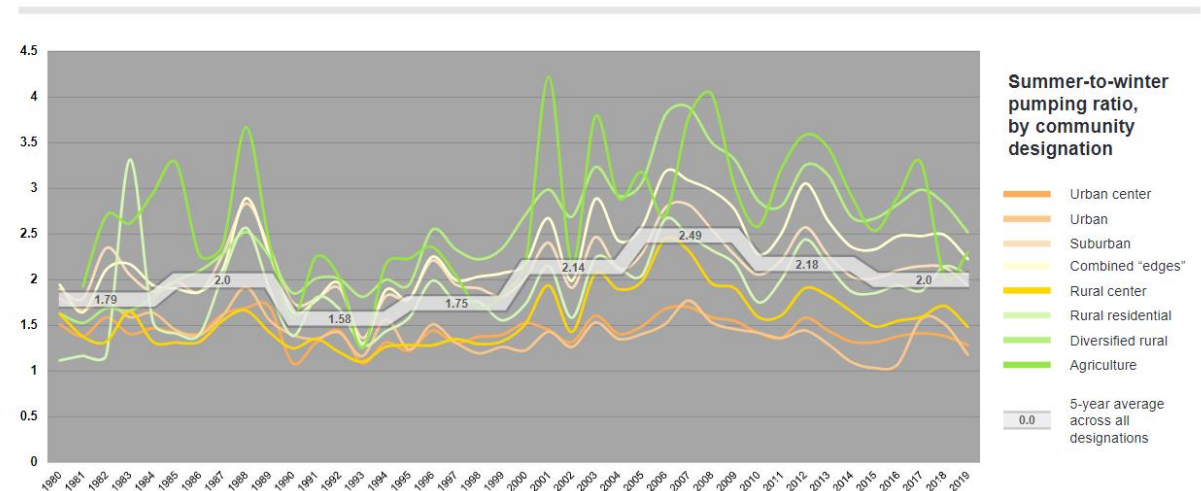
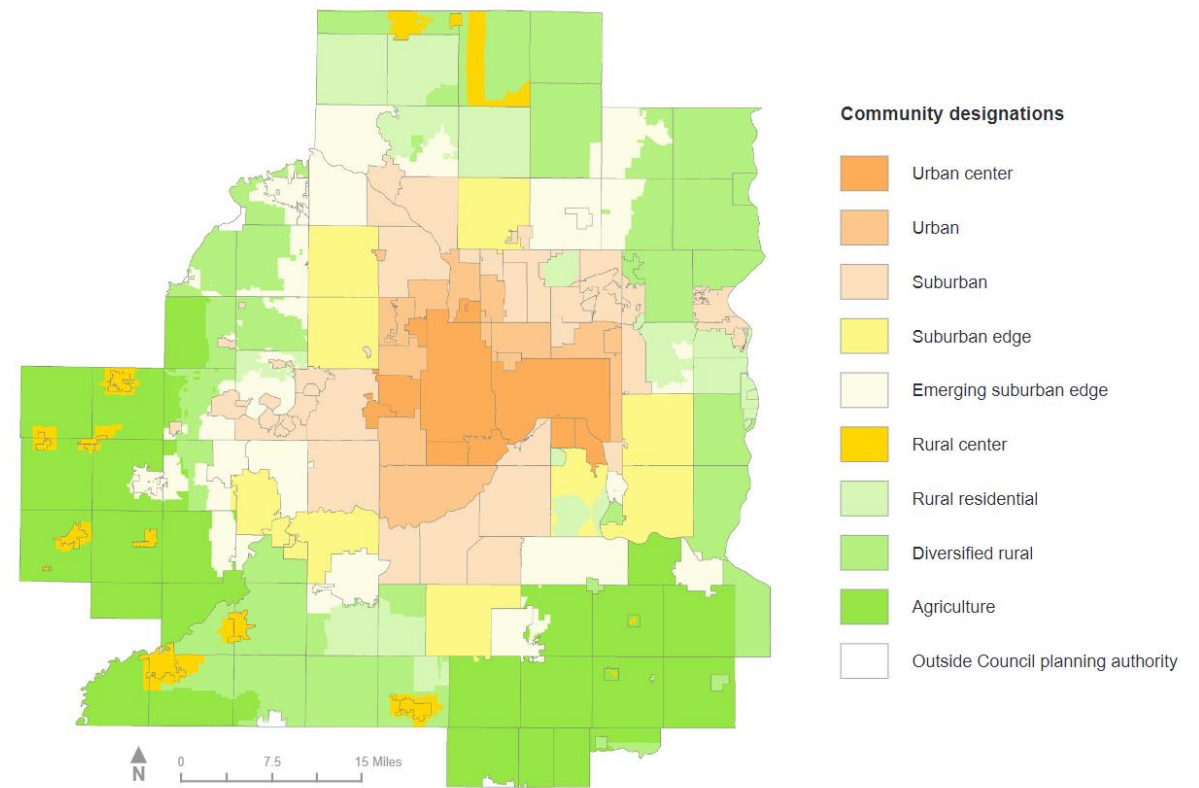


Data source(s): Metropolitan Council (as of 2011, Burnsville and Savage updated 2021)



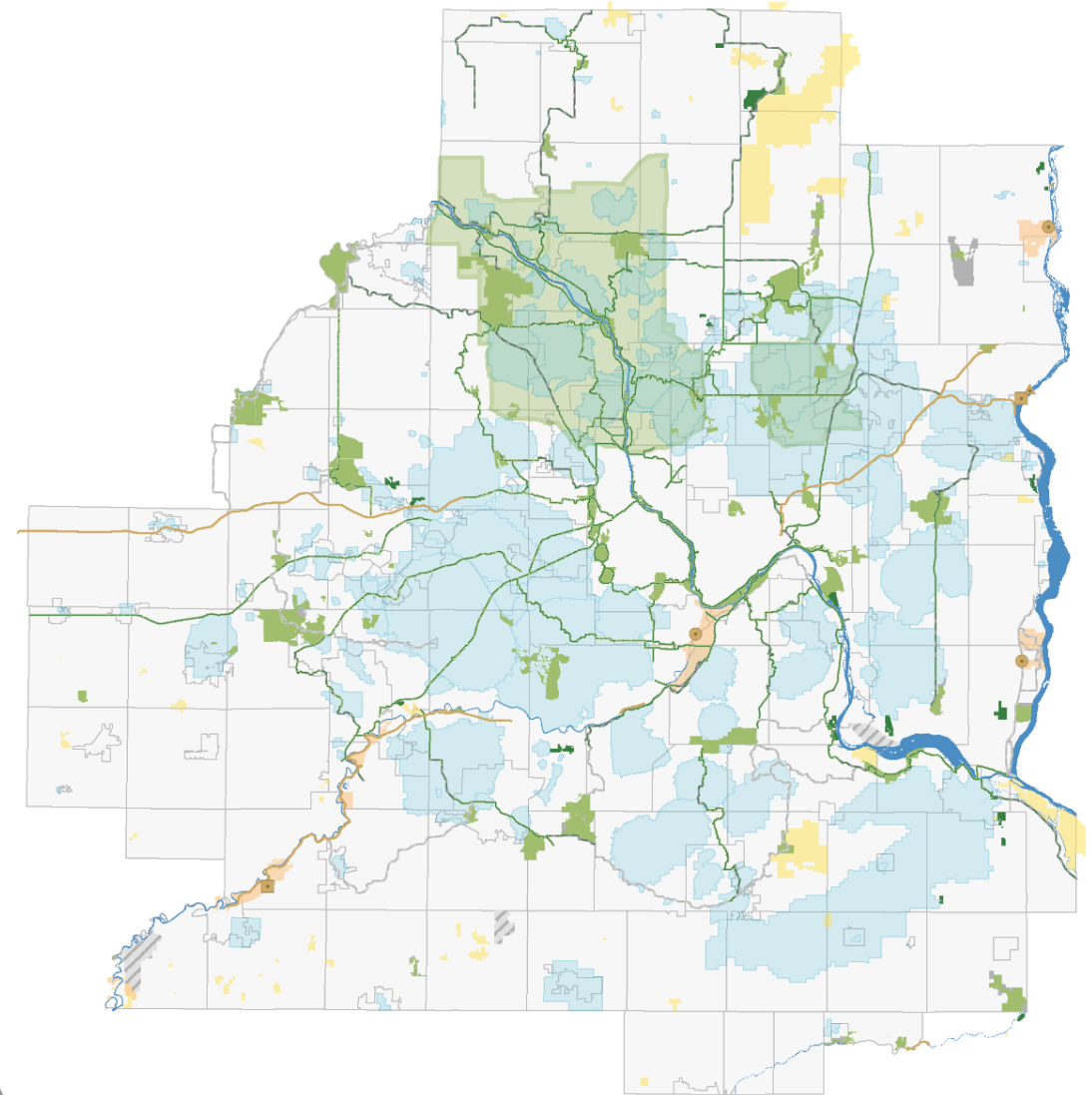
Summer versus winter water use varies by community type

- Different types of communities have different water demand patterns and challenges.
- Opportunities to tailor regional water policy development and technical assistance

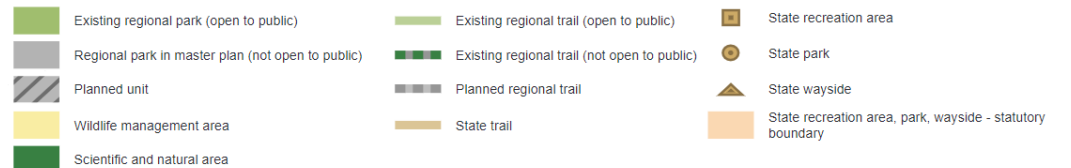


Regional parks and source water protection

- Regional and state parks and trails connect to water.
- Opportunities for water quality protection through land management and outreach and engagement.

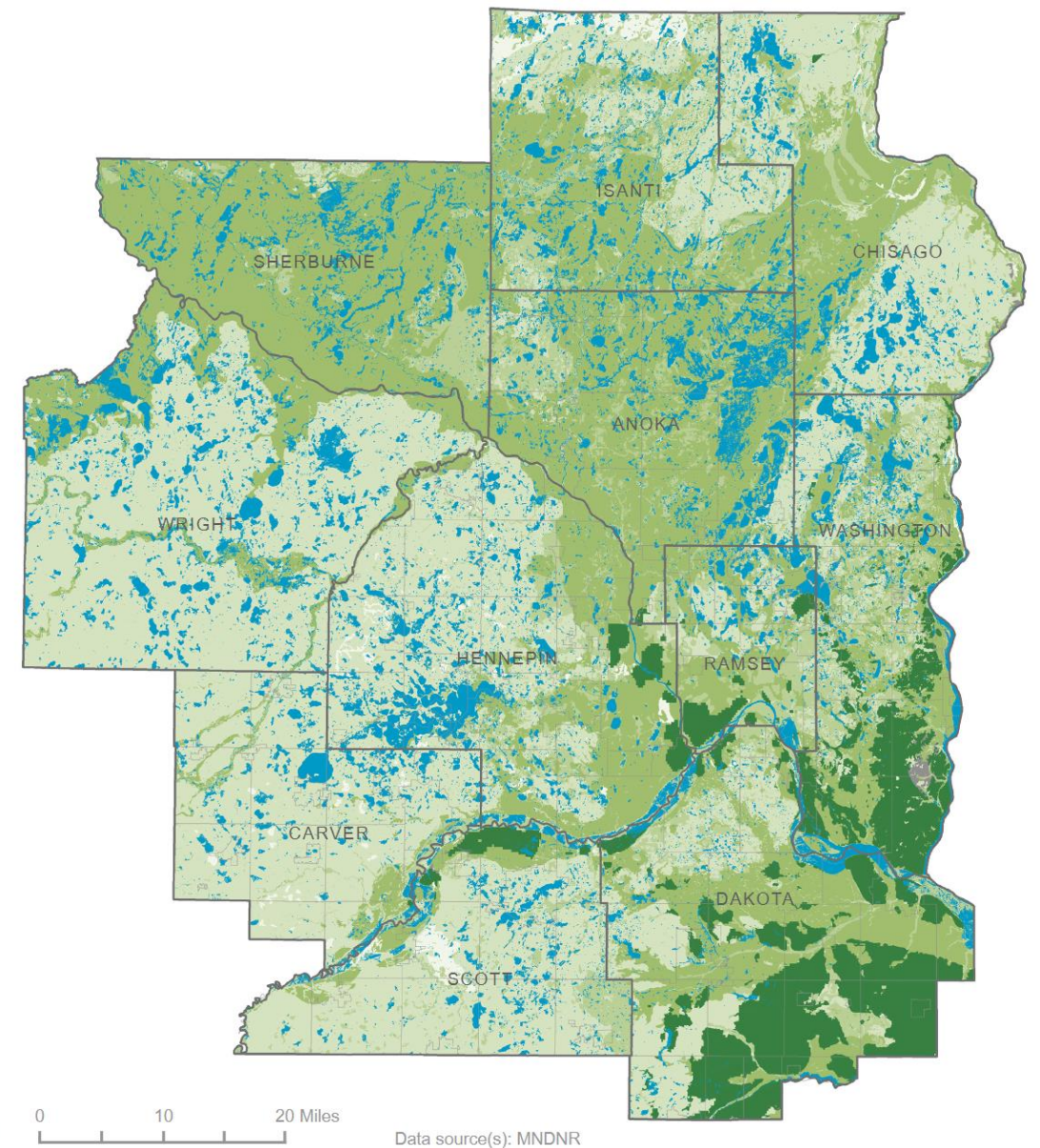


Data source(s): Metropolitan Council, MNDNR



Pollution sensitivity of the landscape

- Some areas are more sensitive to pollution.
- Opportunities to prioritize pollution prevention or remediation programs.



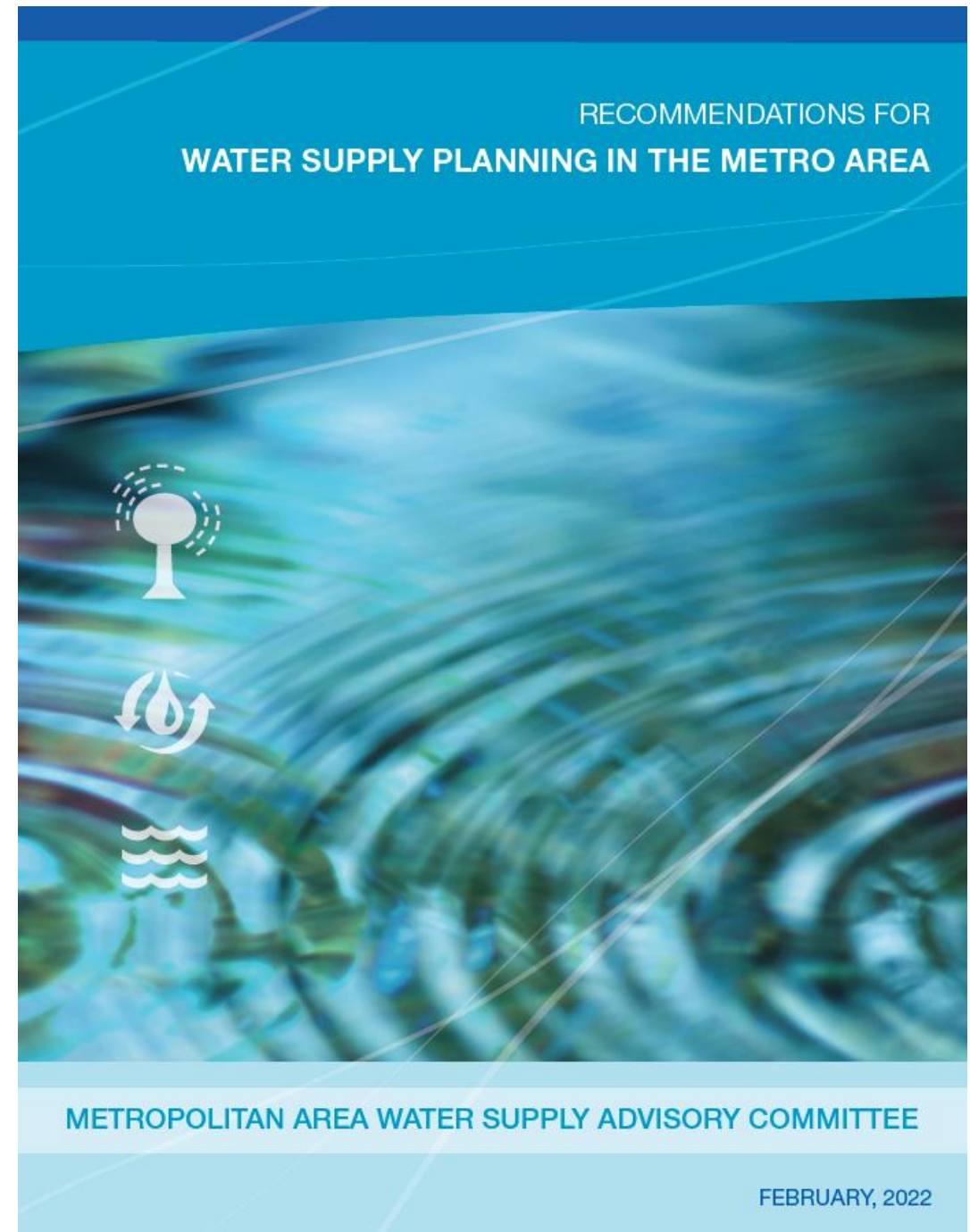
Resources

See a summary and the full report and other committee work on MAWSAC's webpage:

- <https://metro council.org/Council-Meetings/Committees/Water-Supply-Advisory-Committee.aspx>

Learn more about the Council's water supply planning work on the Water Supply Planning webpage:

- <https://metro council.org/Wastewater-Water/Planning/Water-Supply-Planning.aspx>



Questions

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