

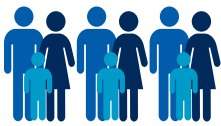
METRO WATER SUPPLY CHALLENGES: YOUR ACTION WILL MAKE A DIFFERENCE

January 2022

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**

RECOMMENDATIONS FOR WATER SUPPLY PLANNING

Highlights of a report to the Minnesota Legislature and the Metropolitan Council

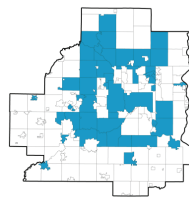
The Twin Cities metro area – despite our relatively abundant supply of clean water – faces challenges like water pollution, growth, aging infrastructure, and climate change. Current regional issues like PFAS, chloride pollution, and impacts of the historic summer 2021 drought must be addressed.

Leaders have an opportunity to set in place a critical strategy to ensure the long-term sustainability of the region's water resources. The federal Infrastructure Investment and Jobs Act of 2021 will award Minnesota \$680 million over five years to improve water infrastructure and ensure clean, safe drinking water for all communities.

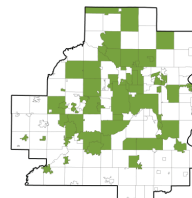
The Metropolitan Area Water Supply Advisory Committee and its Technical Advisory Committee, which assist the Metropolitan Council in carrying out its water supply planning activities, published the 2022 report *Recommendations for Water Supply Planning*. The report is a guide for decision makers on how to approach priority water supply challenges in the coming years.

PLANNED INFRASTRUCTURE THROUGH 2040

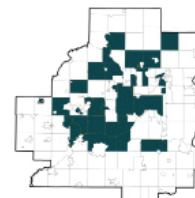
Wells



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

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



EIGHT CONDITIONS THAT DEFINE REGIONAL WATER 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

SUPPORT THESE GOALS TO REACH OUR VISION

Addressing the region's increasingly complex water problems requires requires collaboration. We identified four focus areas and set goals for maintaining a safe, sustainable water supply across jurisdictional boundaries:



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

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.



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.

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.



VISION: SUSTAINABLE WATER SUPPLIES

Our vision is a sustainable water supply for the entire region now and in the future.

- All people have access to clean, safe, affordable water and wastewater services.
- All water and wastewater systems have sufficient funding to provide affordable services.
- All communities share in the economic, social, and environmental benefits of investment in water systems.

PROJECTED WATER USE

2040
More Use:

2015
Water Use:

+100

350

Million Gallons per Day

2021 INFRASTRUCTURE INVESTMENT & JOBS ACT

\$680M over 5 years to replace aging infrastructure, connect underserved communities to public water systems, and reduce lead in drinking water.

COMMIT RESOURCES TO WATER SUSTAINABILITY



No single effort can achieve our goals. These recommended action steps support better risk management across the region's full water supply system and advance the goals.

Expert partners will help direct a more complete assessment of the region's water supply system, along with measures to reduce risks and hazards. The result will be sound technical information for state, regional, and local partners to develop and implement effective water plans, programs, and projects.

To achieve the goals for the four priority focus areas, a wide range of actions must be taken across the entire water supply system – from source through use to reclamation and back to the environment. Key steps for action are outlined below. A more detailed list of recommended activities is in Table 1 of the *Recommendations for Water Supply Planning* report.



COLLABORATION AND CAPACITY BUILDING

COLLABORATION AND CAPACITY BUILDING

- Continue engaging leaders across the water sector
- Connect diverse technical experts
- Build and maintain capacity for collaborative work over the long-term



SYSTEM ASSESSMENT

SYSTEM ASSESSMENT

- Describe, document, and diagram the water supply system at a multi-community scale
- Identify potential hazards
- Determine potential risks



MITIGATION MEASURE EVALUATION

MITIGATION MEASURE EVALUATION

- Identify and evaluate existing and potential measures to reduce hazards and risks to our water supply
- Prioritize risks



PLANNING AND IMPLEMENTATION

PLANNING AND IMPLEMENTING RISK REDUCTION PRACTICES

- Establish a new subregional water supply planning approach
- Target regional guidance and incentives
- Better prepare for the unexpected
- Support local planning and implementation
- Check outcomes and adapt to continuously improve

LEGISLATORS & MET COUNCIL MEMBERS CAN SUPPORT THIS WORK

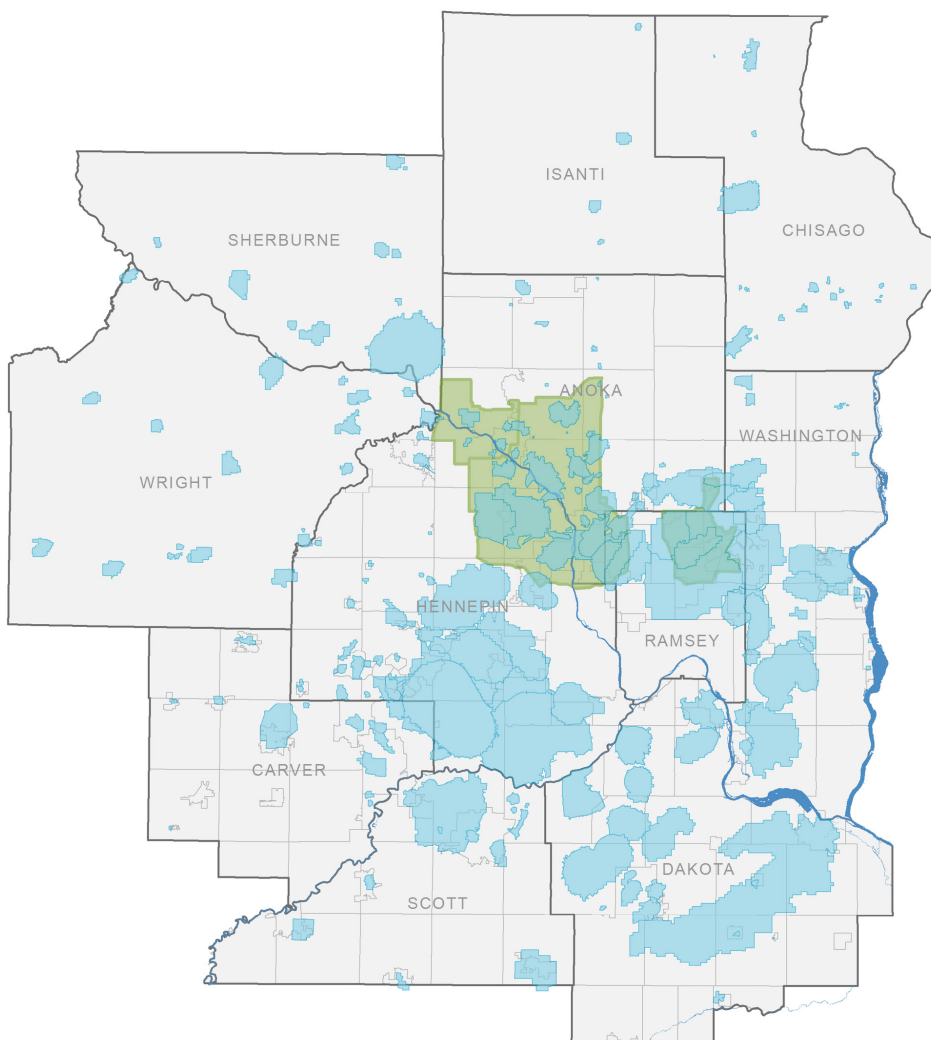


Legislators and state agency leaders should consider the following as you propose legislation, program development, and funding for the work made possible by the new Infrastructure Investment and Jobs Act of 2021 and other water-supply-related funding:

- 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.

Please share information in this summary and the full report in your committee deliberations – particularly those with jurisdiction over environment, natural resources, commerce, and public health.



PROTECTING THE REGION'S SOURCE WATER

More than half of Minnesota's population lives in the metro area, and 90% of them get their water from the 1,000 square miles that have been designated as source areas for drinking water (groundwater areas in blue, surface water areas in green).



Data source(s): MDH



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