Recommendations: Infrastructure

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MAWSAC Meeting: November 16, 2021

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PRE-WORK: Review info shared by committee members and staff in memo attached to meeting agenda

Resources related to the following topics:

- Funding opportunities and programs
- Local work around infrastructure changes and innovations
- Infrastructure challenges
- Existing infrastructure databases
- Technical guidance
- Community data

Committee members are encouraged to share useful and interesting resources!

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Working Together

Metro Area Water Supply Advisory Committee (MAWSAC)

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

What recommendations to make as a committee around infrastructure?

This information will be included in a 2022 report to the Metropolitan Council and Minnesota Legislature.

Presentation overview:

1) Introduce proposed language
2) Consider regional and local context
3) Explore and revise proposal
4) Next steps

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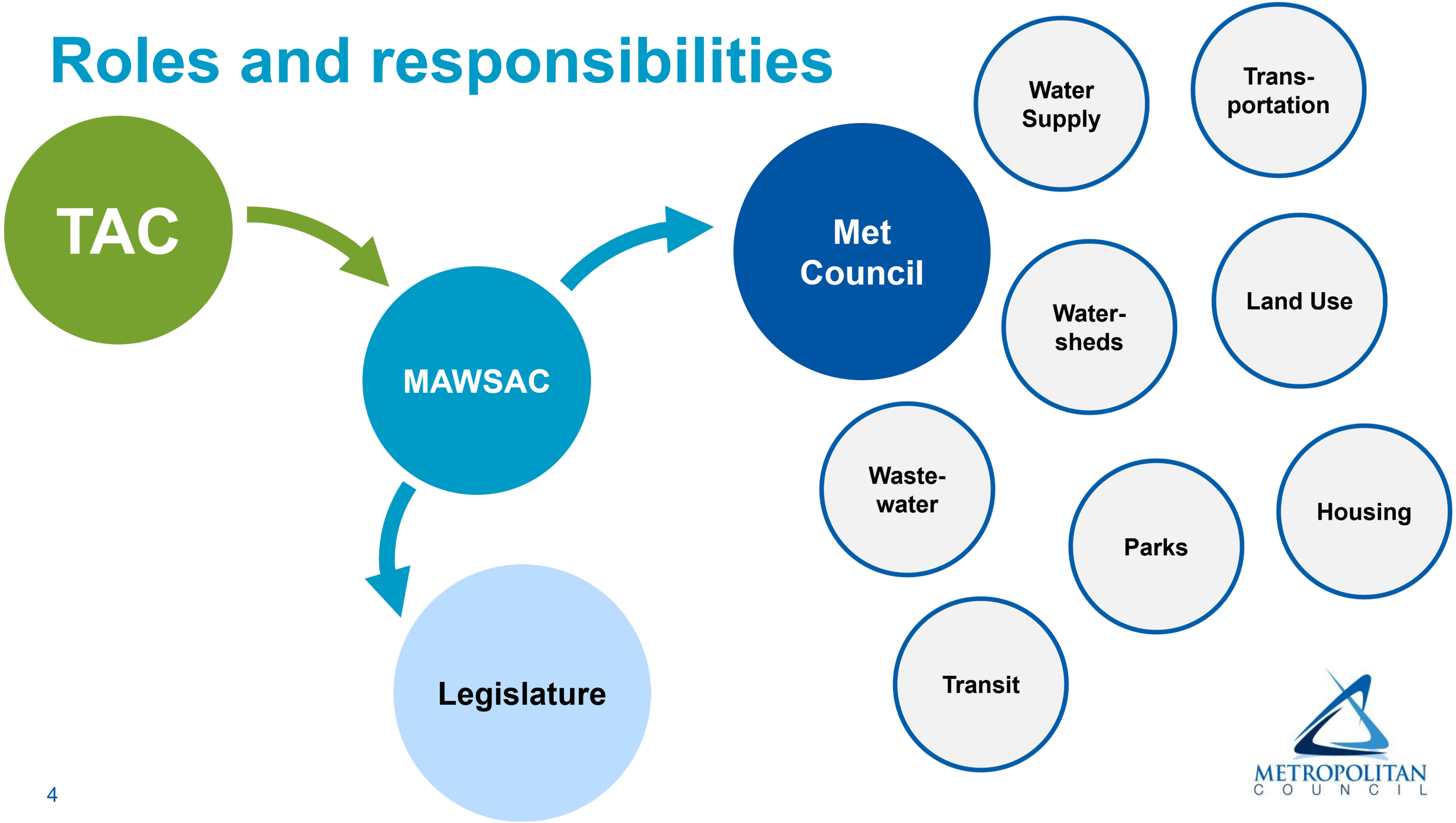
Roles and responsibilities



Infrastructure

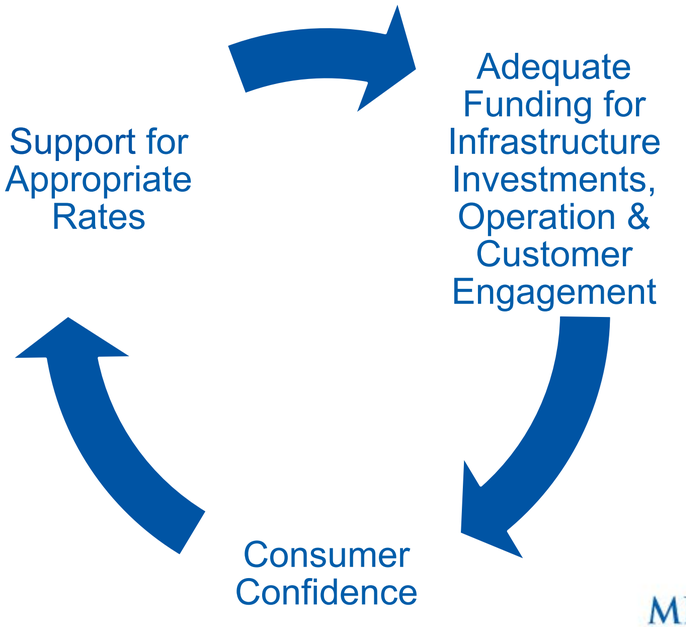
DRAFT RECOMMENDATIONS

Problem or need

Aging infrastructure, changing water demand, water affordability, decreased revenue, water contamination, management of public perception and confidence in water are a few of the ongoing challenges faced by utilities. Examples of unplanned events like contamination, new regulatory limits, or changing land use plans that do not consider the long-term public infrastructure costs add an additional challenge to maintain the ongoing sustainability of the region's water supply infrastructure.

Goal

The value the region receives from existing water supply infrastructure investments is maximized by supporting communities to act nimbly and equitably in addressing changing water demand, climate impacts to water supply, aging infrastructure, consumer trust, and addressing water quality needs. Increasing collaboration across communities among utilities, city planners and other staff, and water resources managers to address one concern is likely to address other concerns, as shown in the figure:



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Solutions

- **Outreach, engagement, training** – understand resident's value of water, materials to support education regarding value of water and water infrastructure
- **Research** – database of metro area interconnection and emergency water supply options, equitable rate structures, new versus redevelopment and impact on water supply infrastructure
- **Regional policies & planning** – identify priority areas of risk, long range land use planning and impacts on water infrastructure and source water protection, guidance to PWS in addressing lead service lines and infrastructure resiliency
- **Financial support** – support for climate resilient infrastructure and water use, increase water efficiency in low-income areas, multi-community infrastructure projects

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Technical Advisory Committee (TAC) considerations for MAWSAC

- A more comprehensive regional look at existing data, and work to fill gaps, is needed to better understand the regional water supply system to make smart investments in infrastructure
- People making funding decisions will benefit from having a more in-depth understanding of the scale of maintenance/repair and magnitude of cost of infrastructure renewal
- Staffing shortage is a challenge now and will continue to be a challenge
- Decreased water demand and use through efficiency results in decreased revenue for public water suppliers unless rates change
- Changing contamination limits and rules for water quality standards will be a large expense for PWS

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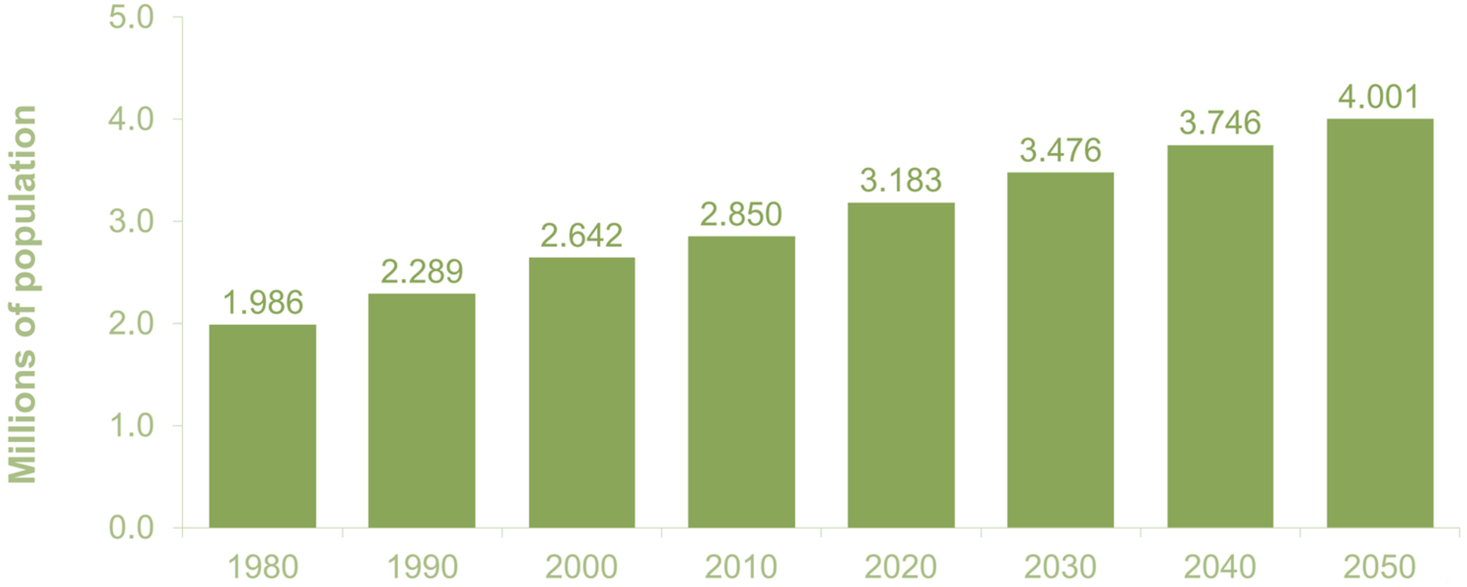
Water sustains us and helps us grow

3 million people in 2020

1.7 million jobs in 2020

100 gallons per person per day

Population growth: 4 million in 2050



We might need to use 100 million more gallons of water each day in 2050.

Learn more about long-range forecasts on the Metropolitan Council website.

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Infrastructure Investment & Jobs Act

Deliver clean drinking water to every American and eliminate the nation's lead service lines and pipes. Minnesota will expect to receive $680 million over five years to improve water infrastructure across the state and ensure that clean, safe drinking water is a right in all communities.

Prepare more of our infrastructure for the impacts of climate change, cyber attacks, and extreme weather events. Minnesota will expect to receive $20 million over five years to protect against wildfires and $17 million to protect against cyberattacks.

Links to more information: Minnesota Summary

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Twin Cities Metropolitan Area

Drinking Water Security & Resiliency Study

Rob Isabel

November 16, 2021

CDM Smith

CLEAN WATER LAND & LEGACY AMENDMENT

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Project Guidance

- TAC members have shared interest and concern for status of:
  - Collaboration/partnerships for safe interconnections;
  - Back-up supplies;
  - Interconnections' possible effects on the amount and quality of water available, and
  - Interconnection studies and emergency interconnection agreements.

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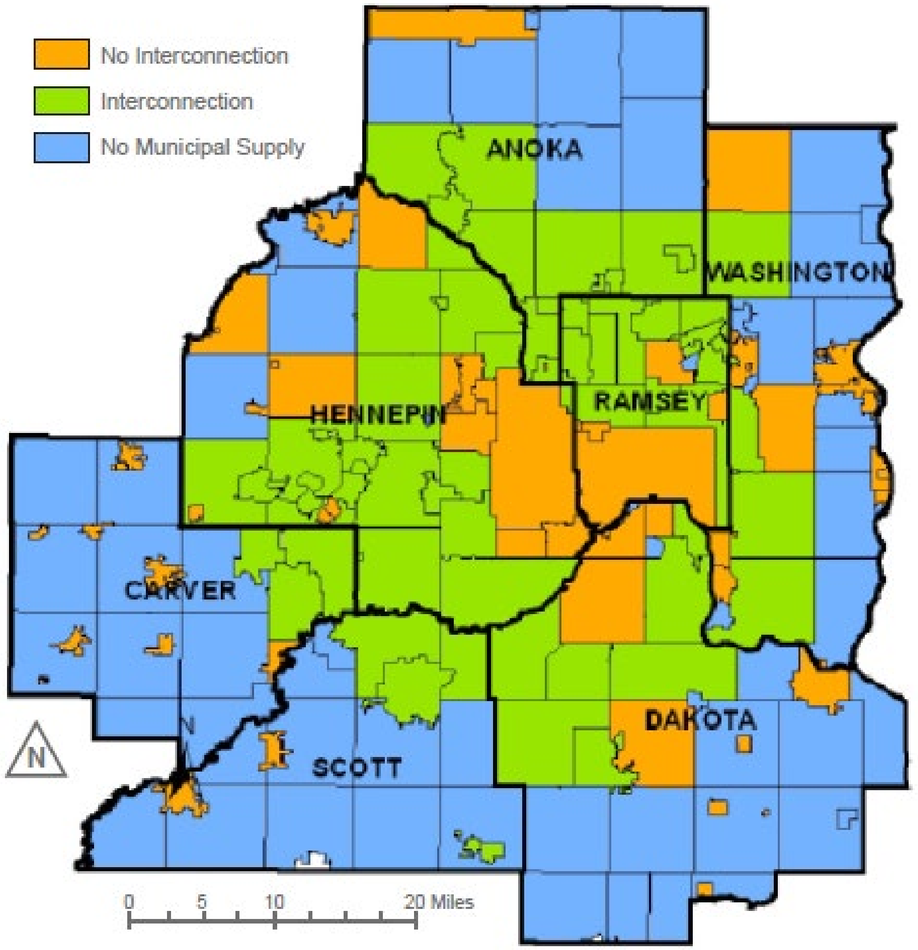
Twin Cities Water Supply Interconnections (2007)



Municipal Water Supply Interconnections, 2007

- A similar analysis, looking only at physical interconnections, was last done in 2007.
- As one can imagine, it is likely things have changed over the past 14 years!

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Project Goal

Develop ***resources*** that assist water supply systems in making sound decisions regarding their growth, infrastructure planning, and water shortage mitigation with an emphasis on the ***security and resiliency*** of their system to meet their customer's demands

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Desired Outcomes and Benefits

- Hear PWS experiences and concerns regarding security and resiliency.
- Learn about any existing procedures and policies.
- Hear PWS ideas of solutions regarding their issues or concerns, if any.
- Provide space for PWS to learn from each other.

- Technical support
- Research
- Funding suggestions or direction
- Tools and Programs
- Advocacy
- Collaboration Assistance

Project Steps and Status

We are here!

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Committed Participants and Small Group Workshop Dates

- Committed Participants
  - Minneapolis
  - St. Paul
  - Roseville
  - Fridley
  - Minnetonka
  - Burnsville
  - Mound
- Workshop Dates
  - October 5
  - October 6

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Local experiences – food for thought

Committee members are invited to share their perspectives.

QUESTIONS

1. What infrastructure problems or challenges, and what impacts, are most concerning?
2. What trade-offs or tensions shape the work?
3. What resources are needed to do this work? Financial and other?
4. Who are key stakeholders/partners and what outreach is effective? Any gaps?
5. How could the Council and/or organizations represented on TAC help?

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Questions

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