

Recommendations: Infrastructure

Emily Steinweg, Senior Engineer, MCES Water Supply Planning

Lanya Ross, Environmental Analyst, MCES Water Supply Planning

TAC meeting: October 19, 2021



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!

Involve



Water Supply TAC

- Pools collective expertise to address increasingly complex water problems that require a collaborative approach.
- Informs MAWSAC's work by providing scientific and engineering expertise.

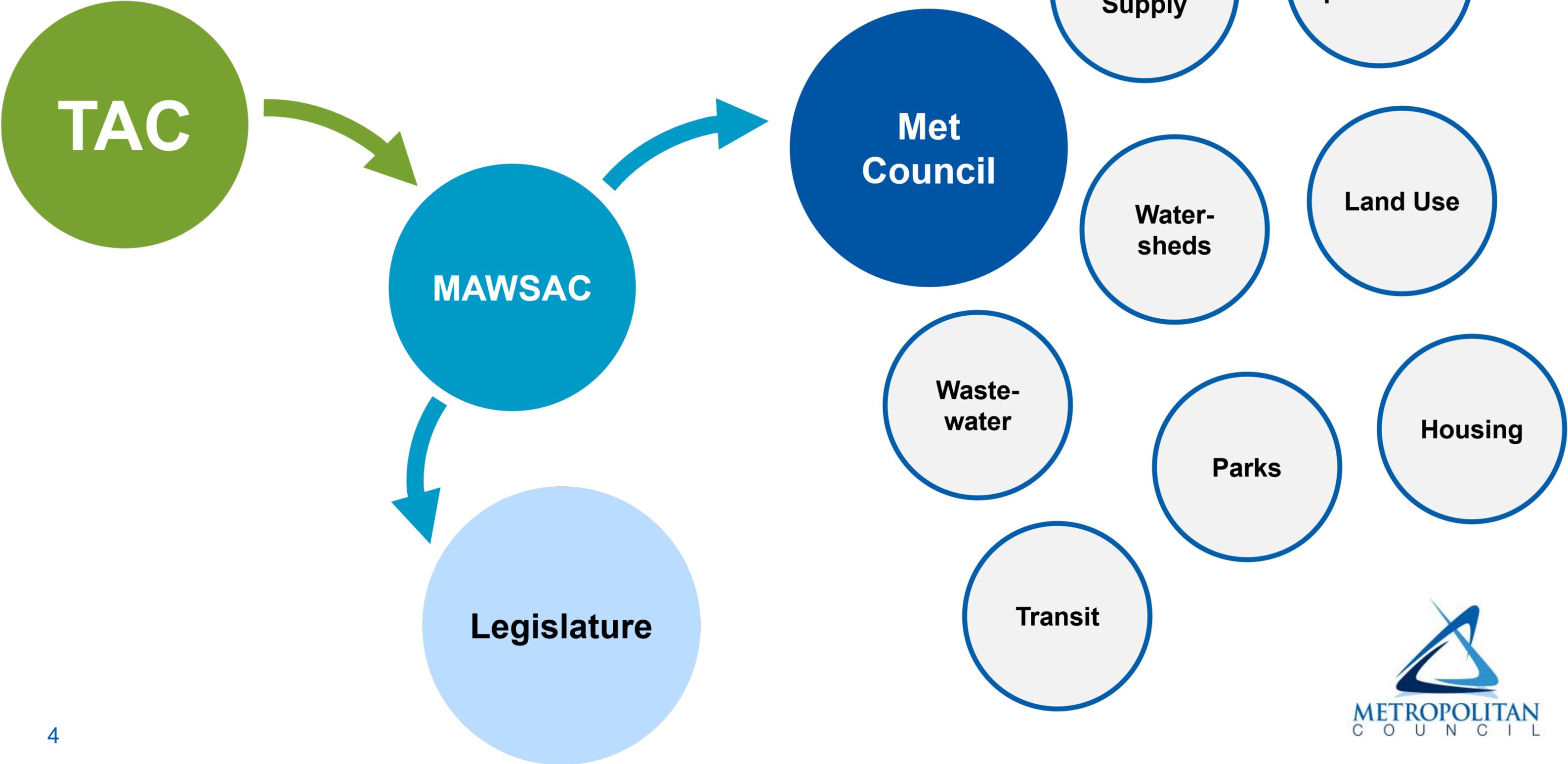
Work together:

Share information for MAWSAC to consider at their next meeting, related to potential recommendations in the area of infrastructure.

Approach:

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

Roles and responsibilities



INFRASTRUCTURE

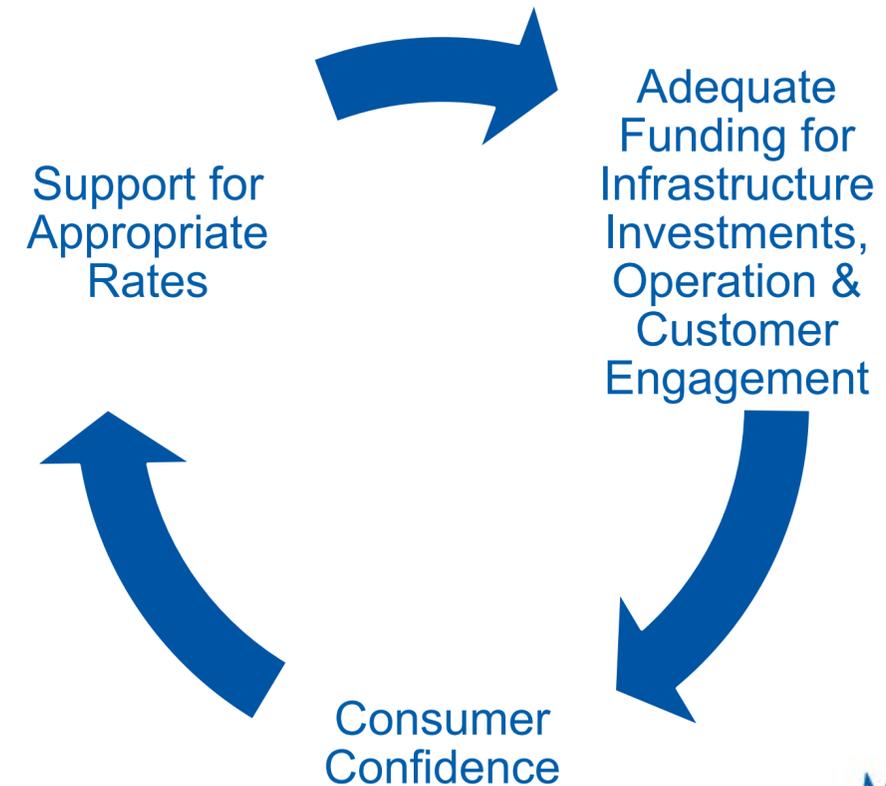
DRAFT RECOMMENDATIONS

Problem or need

It is a persistent challenge to maintain the ongoing sustainability of the region's water supply infrastructure. In some cases, falling consumer confidence may make it harder to get support for water supply infrastructure investment. In others, utilities with a relatively small customer base may struggle to maintain or enhance infrastructure in response to unplanned events like emerging contamination or new regulatory limits. In still others, local and neighboring water supply infrastructure planning may be complicated by changing land use plans that don't consider the related long-term public infrastructure costs.

Goal

The value the region receives from existing water supply infrastructure investments is maximized by supporting utilities to act nimbly and equitably in addressing changing water demand and climate, aging infrastructure, earning consumer trust, and addressing water quality needs. Addressing one concern is likely to address other concerns, as shown in the figure:



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*

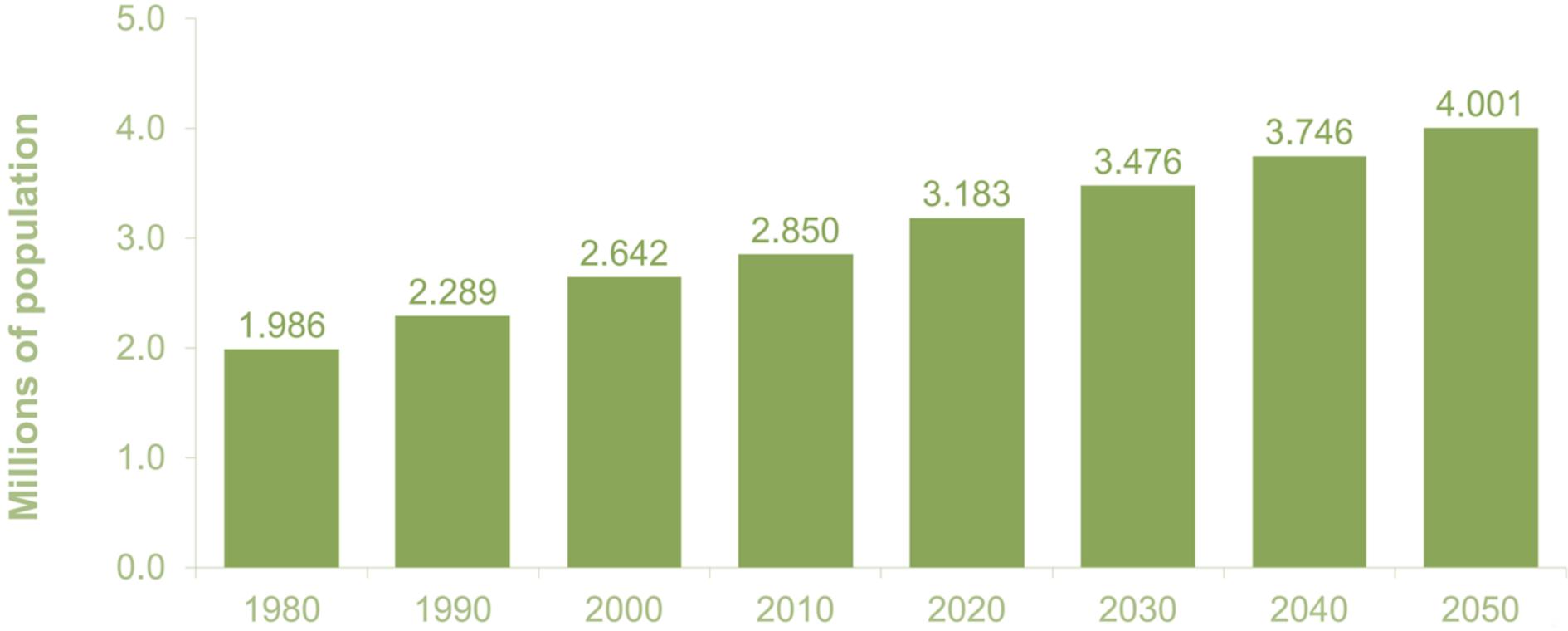
Water sustains us and helps us grow

Population growth: 4 million in 2050

3 million people in 2020

1.7 million jobs in 2020

100 gallons per person per day



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.](#)



Twin Cities Metropolitan Area

Drinking Water Security & Resiliency Study

Rob Isabel

October 19, 2021



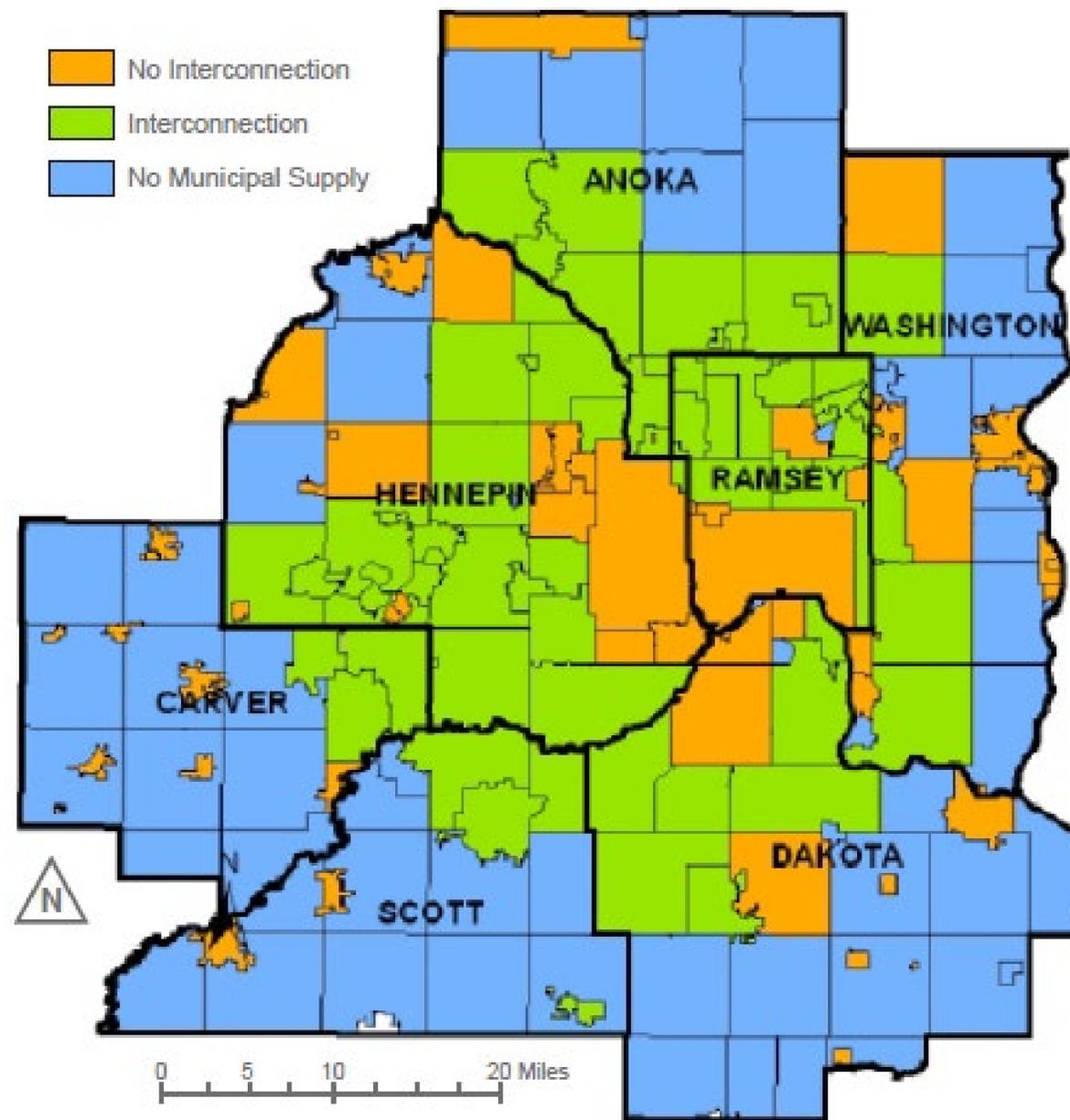
**CDM
Smith**



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.

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!

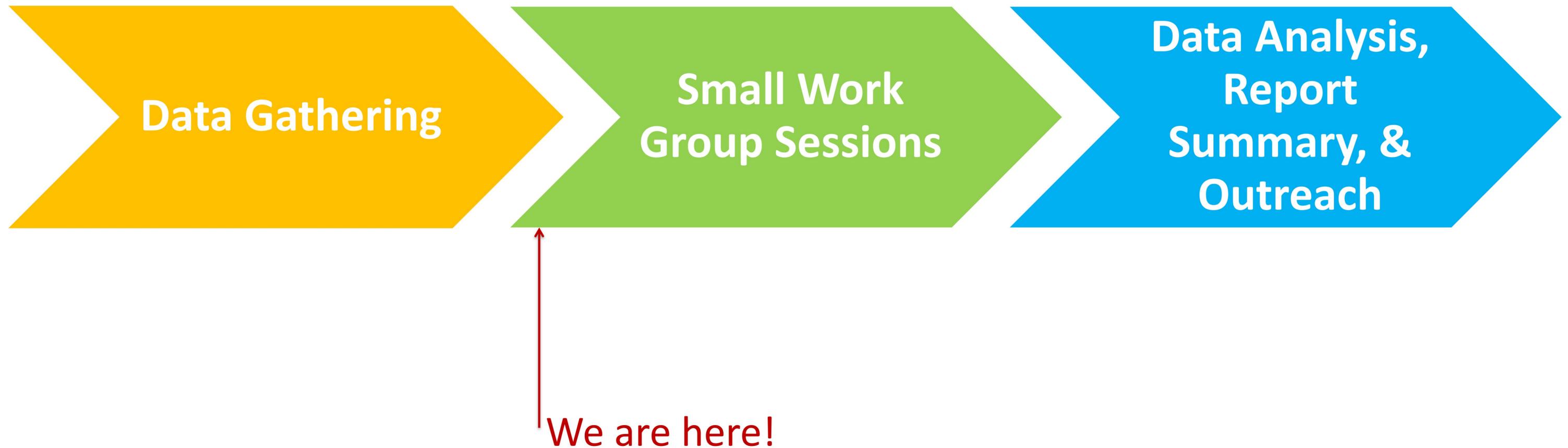
Project Goal

- 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

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



Committed Participants and Small Group Workshop Dates

■ Committed Participants

- Minneapolis
- Roseville
- Fridley
- Minnetonka
- Burnsville
- Mound

■ Workshop Dates

- October 5 – 10am
- October 6 – 2pm

Local experiences – food for thought

Local utility and water resource managers invited to share their experience working on specific projects or programs.

QUESTIONS

1. What was the problem or challenge, and what impacts were most concerning?
2. What trade-offs or tensions shaped the work?
3. What resources were needed to do this work? Financial or 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?

Questions

Lanya Ross

Environmental Analyst, MCES Water Supply Planning

Lanya.Ross@metc.state.mn.us

651-602-1803

Emily Steinweg

Senior Engineer, MCES Water Supply Planning

Emily.Steinweg@metc.state.mn.us

651-602-1516

