

Information Item:
**2020 Water Supply Planning Report to the
Minnesota Legislature**

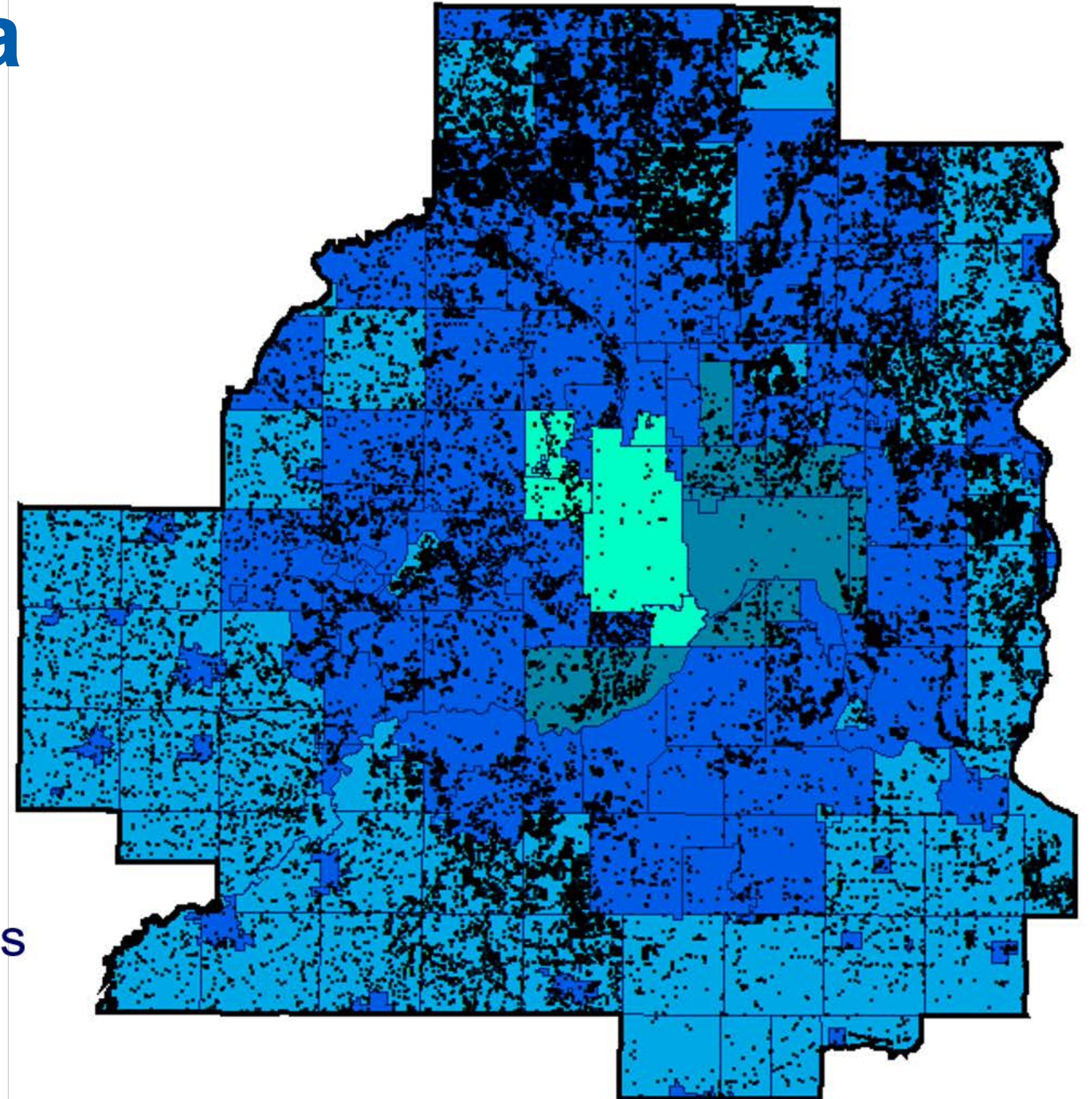
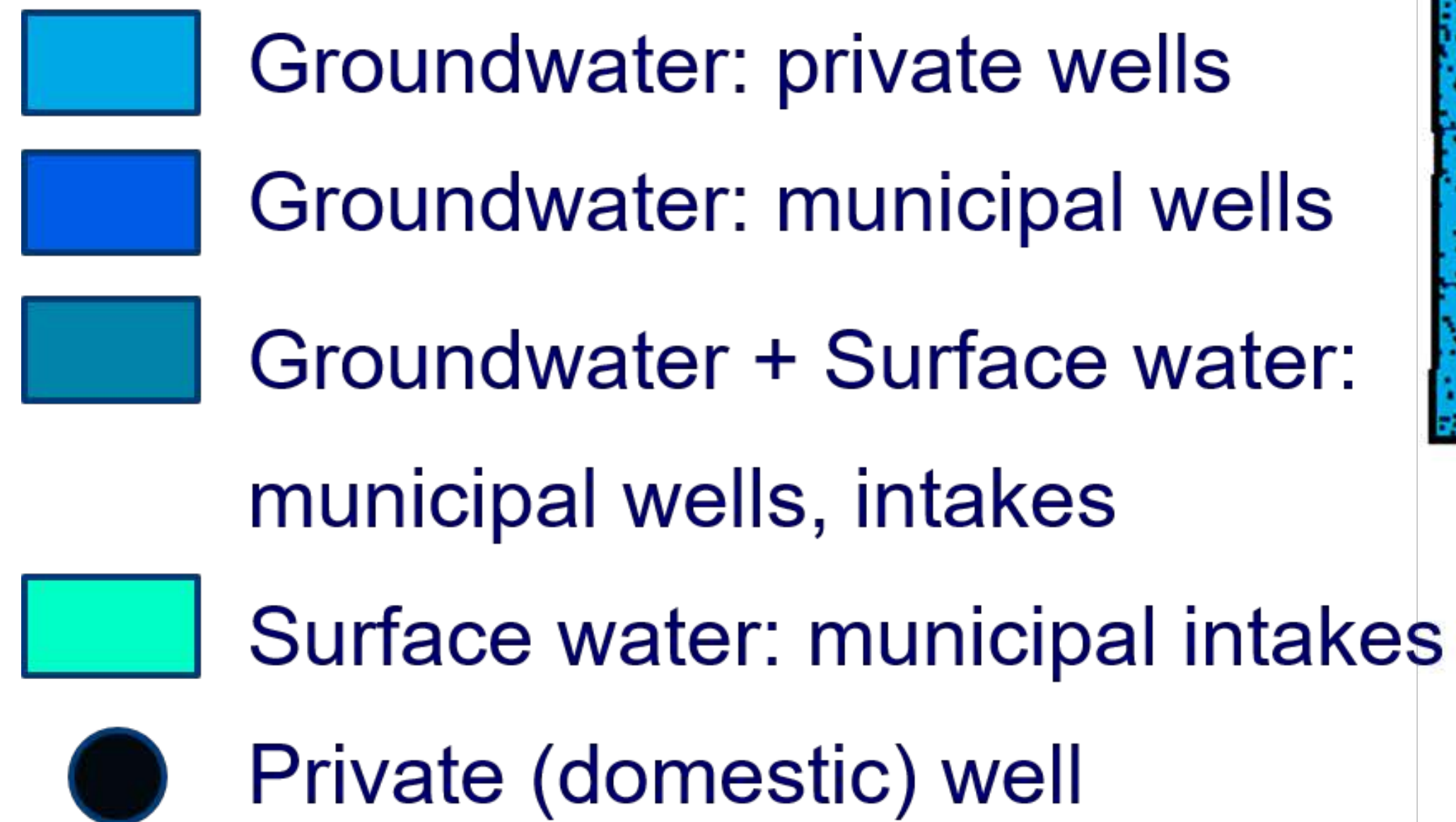
Lanya Ross, Environmental Analyst

Metropolitan Council: September 9, 2020



Water Supply Planning in the Twin Cities Metro Area is a Collaborative Endeavor

- 186 Cities and townships
- 100+ Water utilities



Minnesota Statutes 473.1565

METROPOLITAN AREA WATER SUPPLY PLANNING ACTIVITIES; ADVISORY COMMITTEES

Enacted 2005



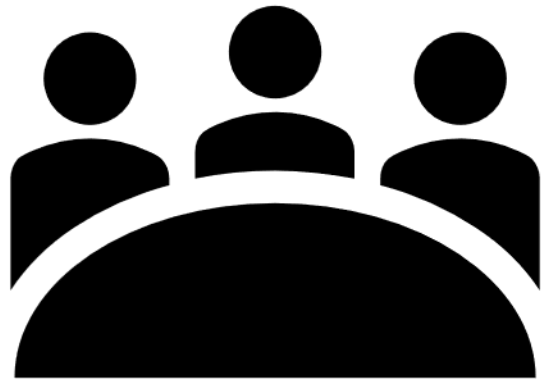
**Technical
Information**



Planning



Recommendations



**Advisory
Committees**



Reports

Contents

- **Water supply at a glance**
- **Shared principles**
- **Collaboration, technical investigations, planning, and implementation**
- **Outcomes and future work**
- **Highlights**

“To me, the greatest value in this partnered approach is that documents like the Master Water Supply Plan (2015) are informed by the real experiences and expertise of the local water suppliers that the public has come to trust for safe and sustainable delivery of drinking water.”

**Mark Maloney, Public Utilities Director,
City of Shoreview**

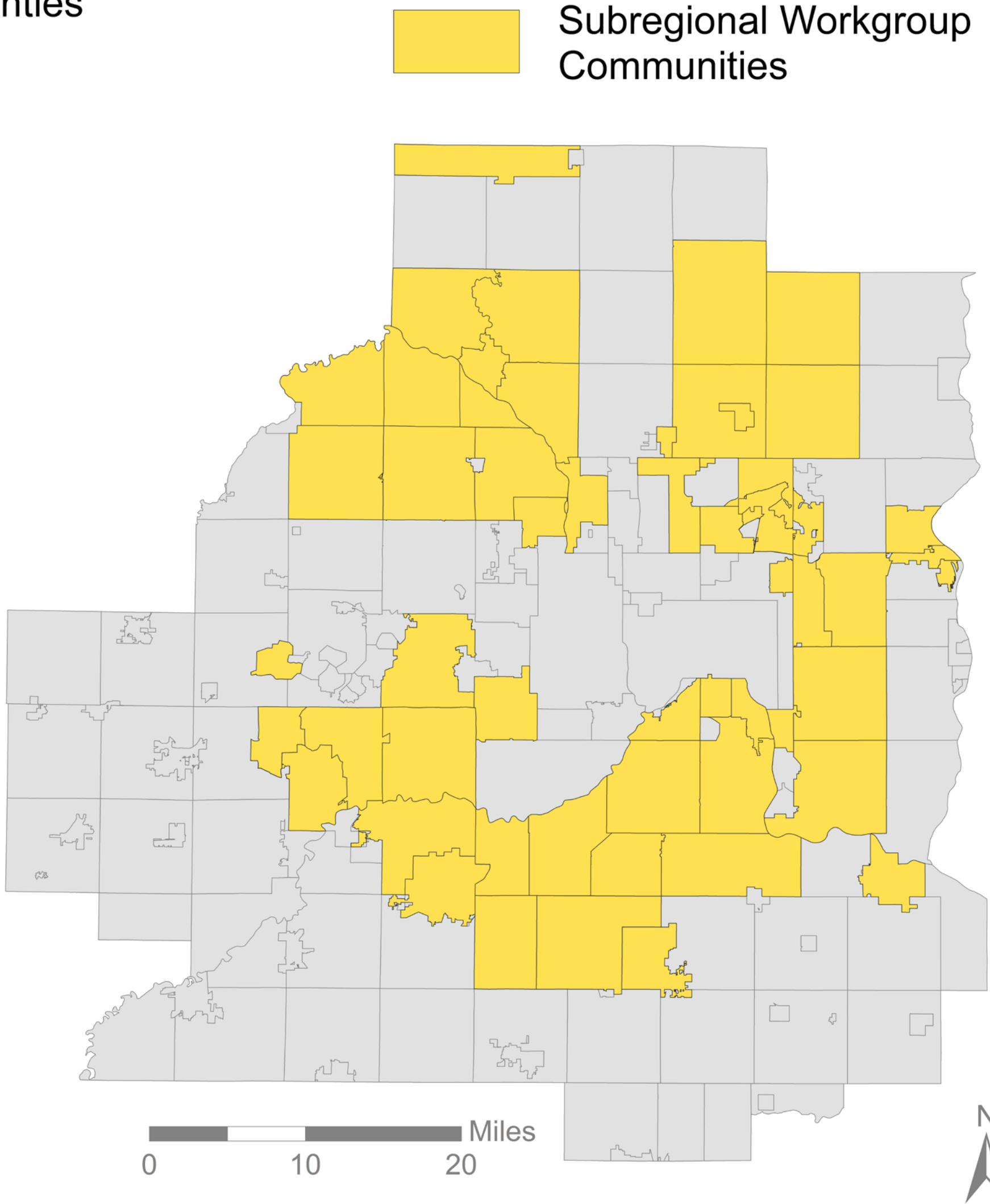
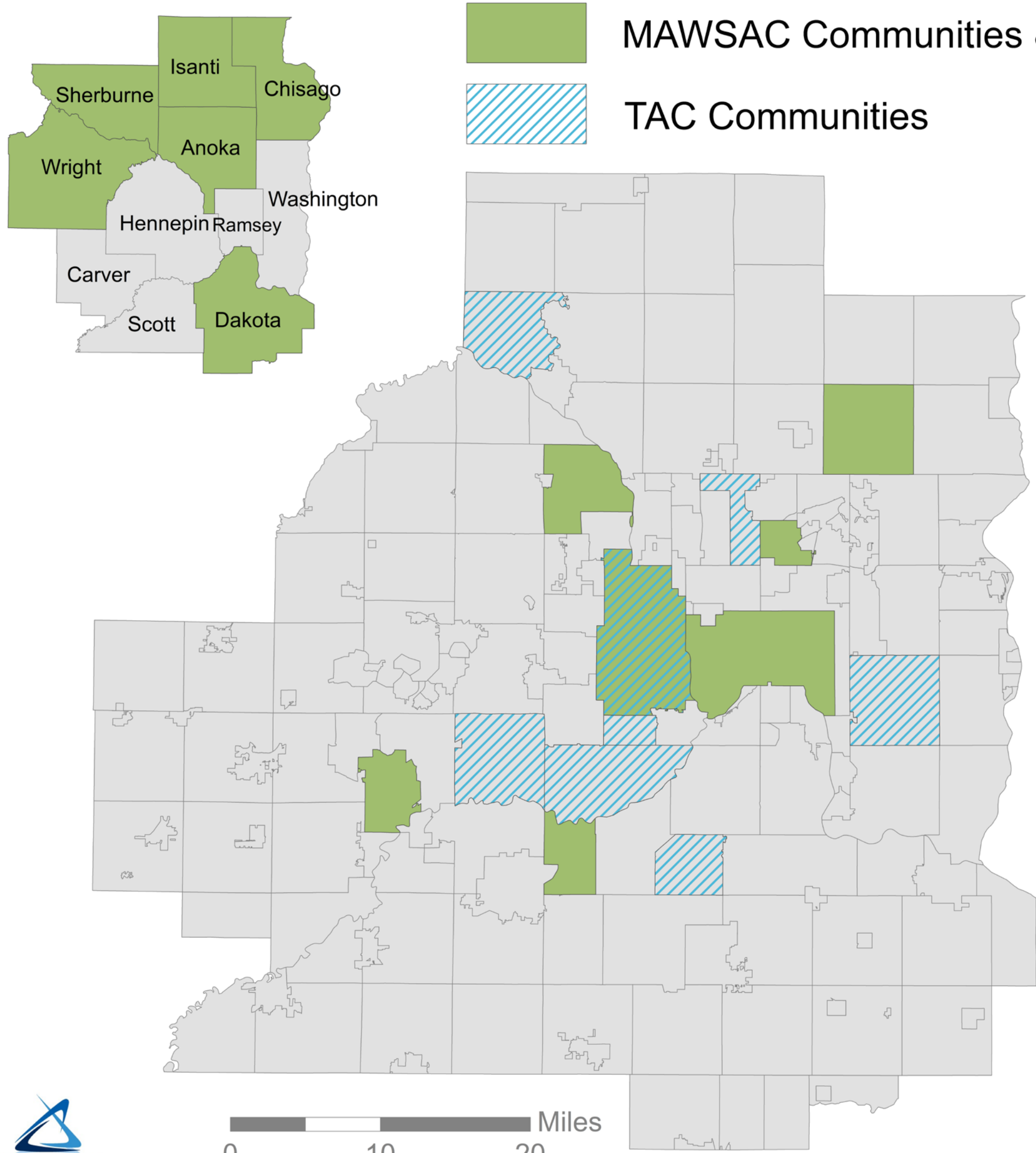


Water Supply at a Glance

- **100+** municipal water supply systems
- **1,500** square miles designated for source water protection
- **10,000+** miles of local water supply distribution pipe
- **60,000** private domestic wells + **5,000** private business wells

Metropolitan Council has a unique role as a planning agency, not as regulator or utility

Collaboration



Technical Investigations

2005-2020

Collected and analyzed new geologic, water level, and water chemistry information

2009-2017

Developed and updated Metro Model

2020 & 2020

Evaluated of groundwater and surface interaction

2015-2020

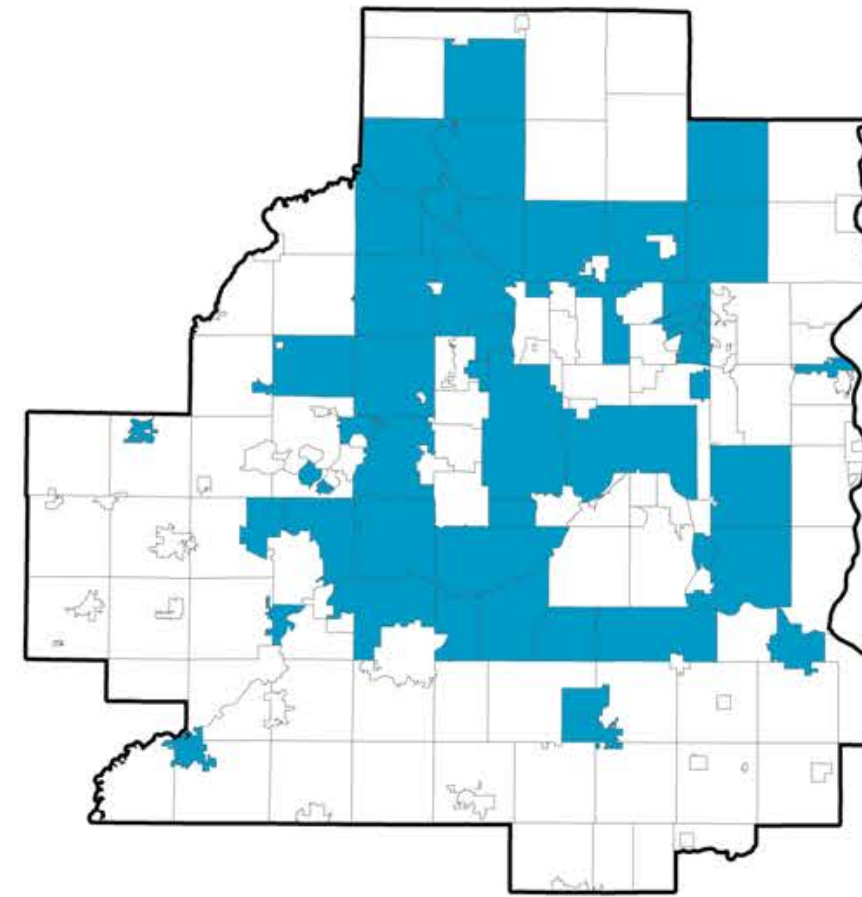
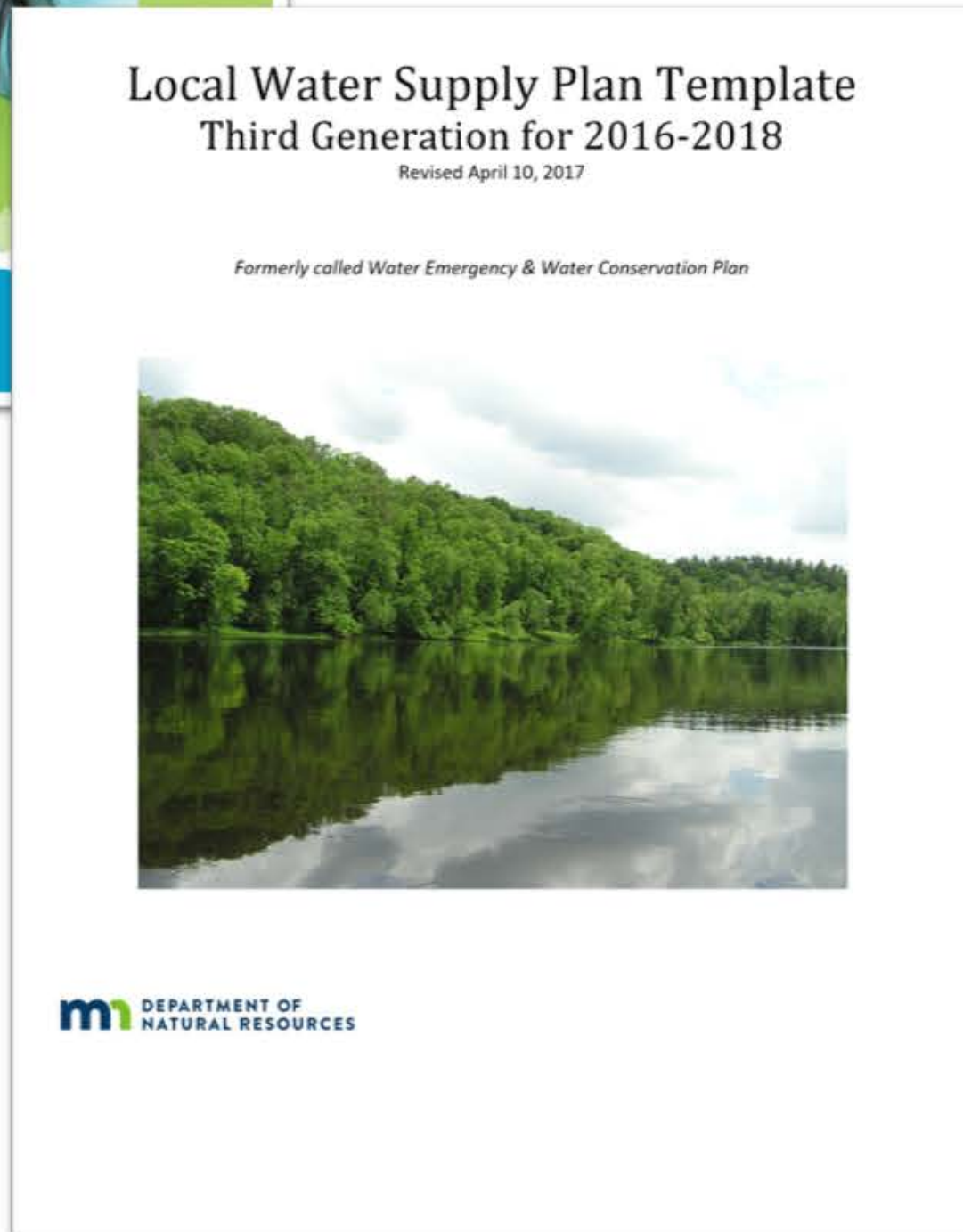
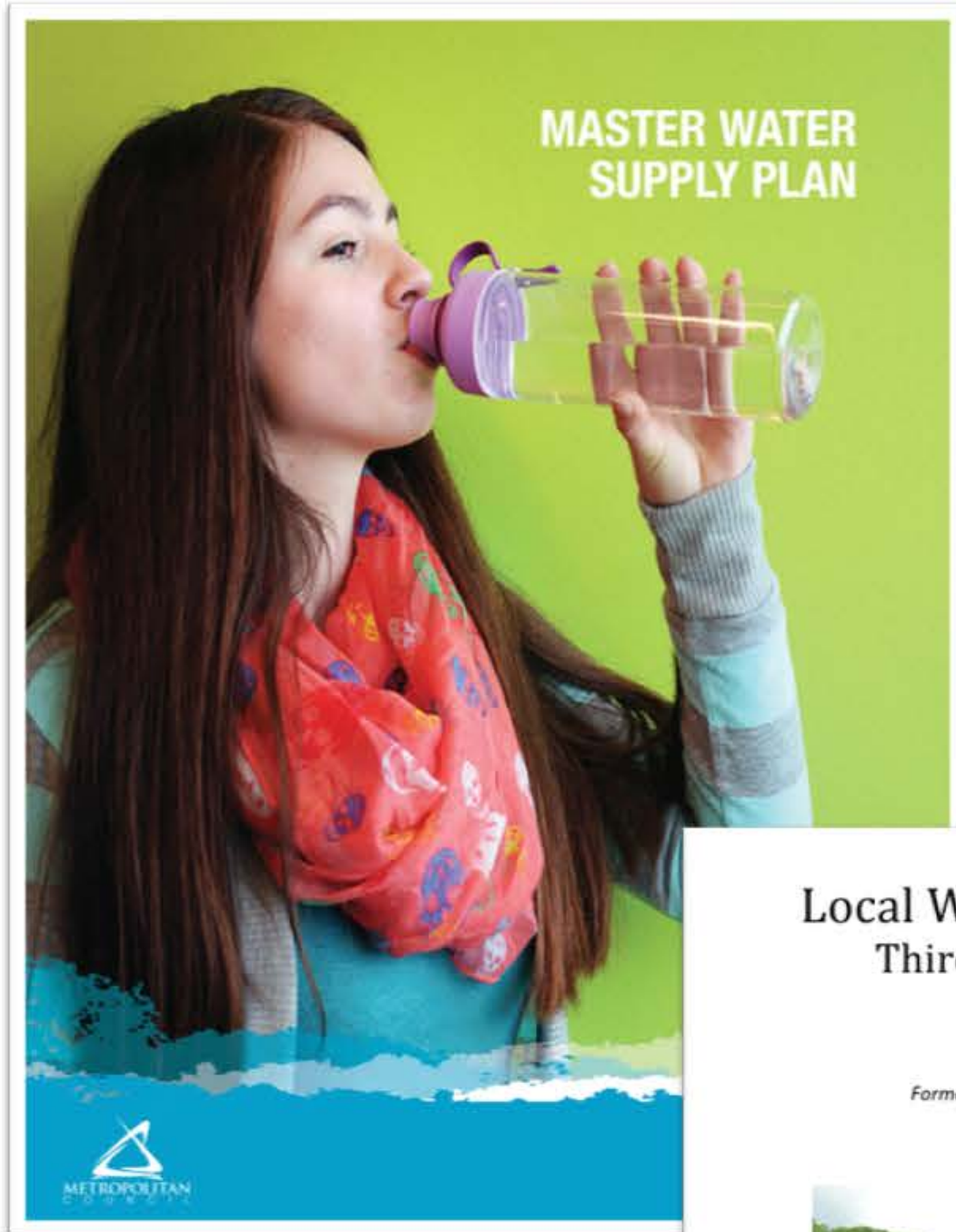
Subregional analyses of alternative water supply approaches

“Council funding of studies and projects was important because it isn’t always easy to get local city councils to commit funds to something that reaches beyond their borders.”

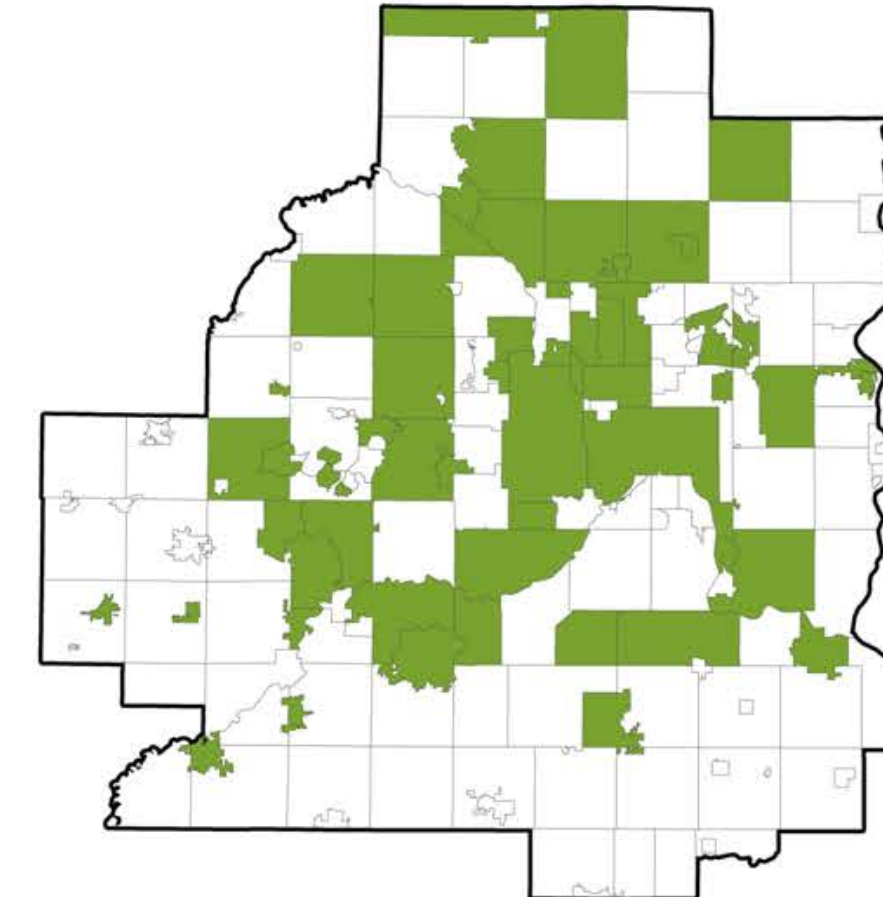
**Steve Albrecht, Former
Burnsville Public Works Director**



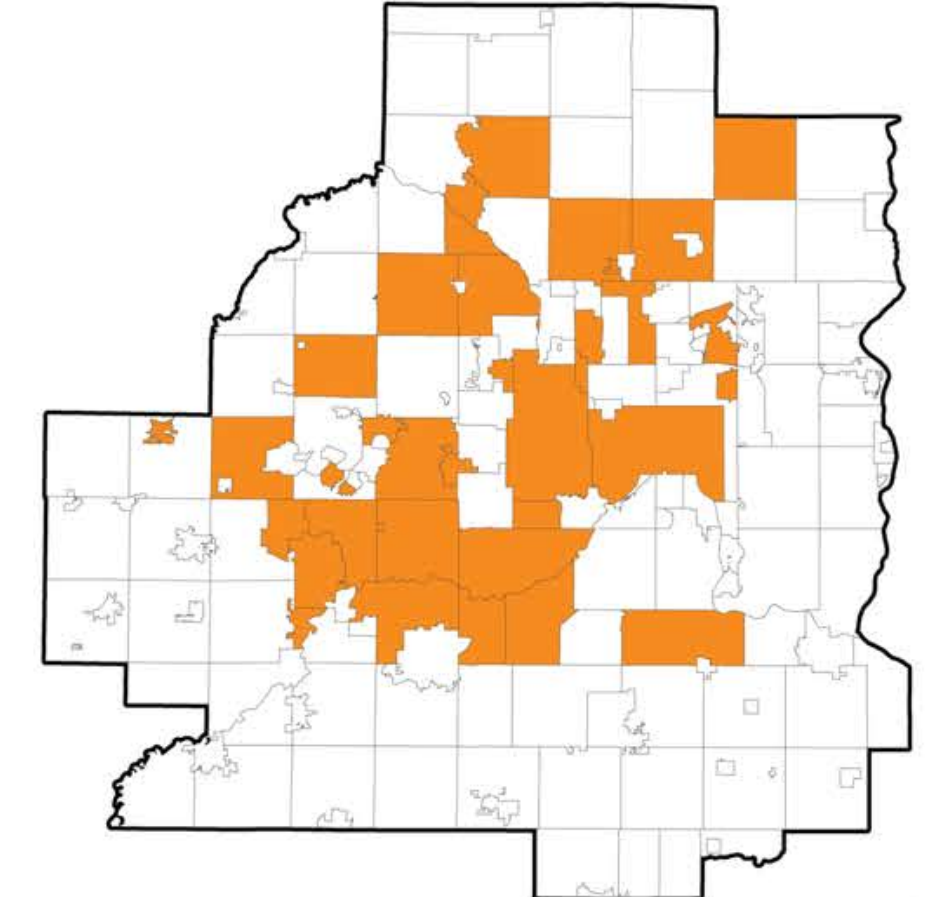
Planning



NEW WELLS
50+ communities



DISTRIBUTION
60+ communities



WATER TREATMENT
35+ communities

Source: 2040 Local water supply plan updates submitted as part of community comprehensive plans. Not all local plan updates have been submitted to the Council; this information will be updated as plans are received.

Implementation for Sustainability

The Master Water Supply Plan defines water supply sustainability as:

- Use of existing water supply infrastructure and investments is maximized
- Surface water use is planned and implemented to maintain protected flows
- Groundwater used is planned and implemented to:
 - Maintain aquifer levels consistent with safe-yield conditions (MN Rules 6115.0630) and/or maintain projected surface water flows and water levels
 - Minimize impacts to groundwater flow directions in areas where groundwater contamination has, or may, result in risks to the public health
- Demand that exceeds sustainable groundwater withdrawal rates is supplied by the most feasible combination of efficiency and conservation, surface water, and/or wastewater and stormwater reuse
- Legislative changes are made that align agency directions on all aspects of water supply
- Water users and suppliers recognize uncertainty and seek to minimize risk

Highlight:

MnTAP Water Efficiency Intern Program



- Launched in 2012
- Student interns placed in metro area organizations
- Between 2013 and 2017 20 projects made 159 recommendations
- As of 2018, the intern recommendations that were implemented save 87 million gallons/year and \$486,000/year
- Still going strong!

Highlight: Water Efficiency Grant Program

2015-2017:

- 19 communities established local water efficiency programs
- 52 million gallons of water saved annually

Council grants help growing communities use water more efficiently

— \$500,000 Water Efficiency Grants —

4,510
TOTAL DEVICES
REPLACED

52 million
gallons
SAVED ANNUALLY

2,380
toilets



29.8 million
gallons
SAVED ANNUALLY

1,190
irrigation controllers



18 million
gallons
SAVED ANNUALLY

940
clothes washers



4.2 million
gallons
SAVED ANNUALLY

2019-2022:

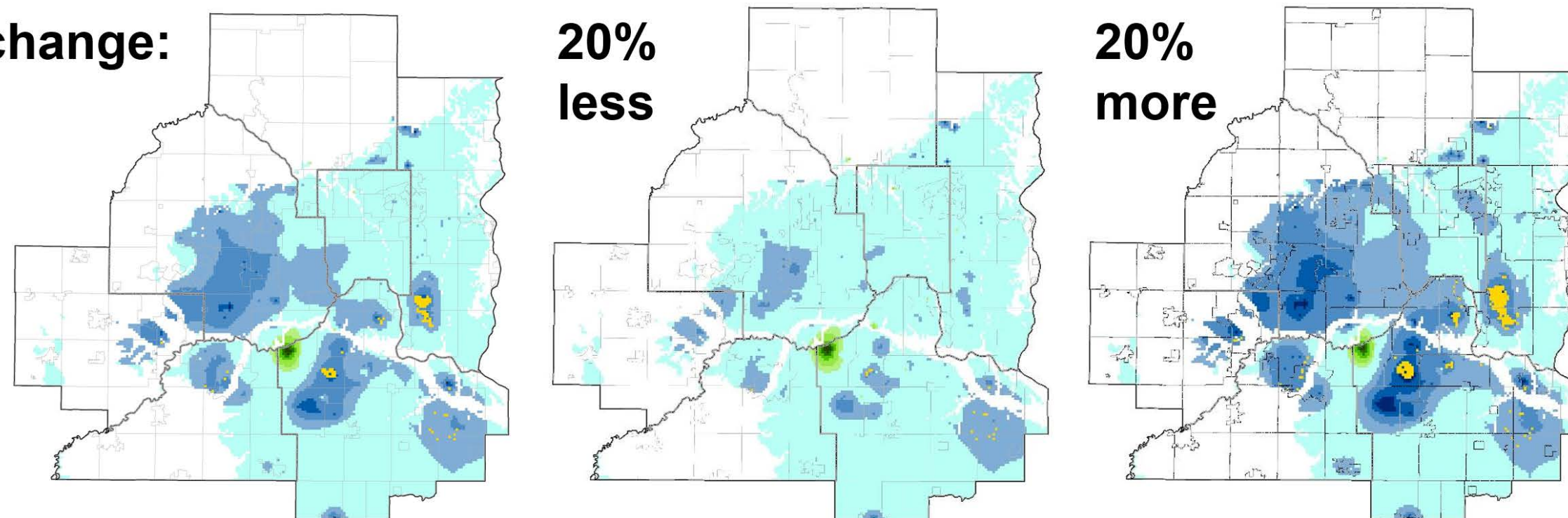
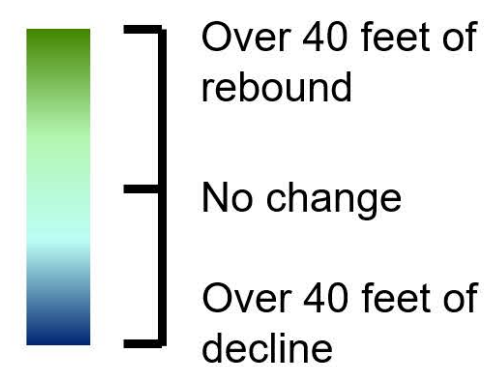
- 40 communities (17 returning)

Highlight: Regional Groundwater modeling

- Supports regional policy
- Many communities use as a starting place for wellhead protection, saving time and money

“Encourage the continued development of a metropolitan groundwater model, as a tool to define aquifers and aquifer recharge areas and as a basis for aquifer protection and management.”

**PDCJ aquifer change:
2010 vs. 2040
pumping**



**Bloomington 2040
Comprehensive Plan Update**

Outcomes

1. Better understanding of shared resources and challenges
2. Successful sub-regional collaborative platform to advance water sustainability goals
3. Better management/long-term resiliency of shared resources
4. More resources focused on regional water supply challenges
5. Better equipped to pursue next steps

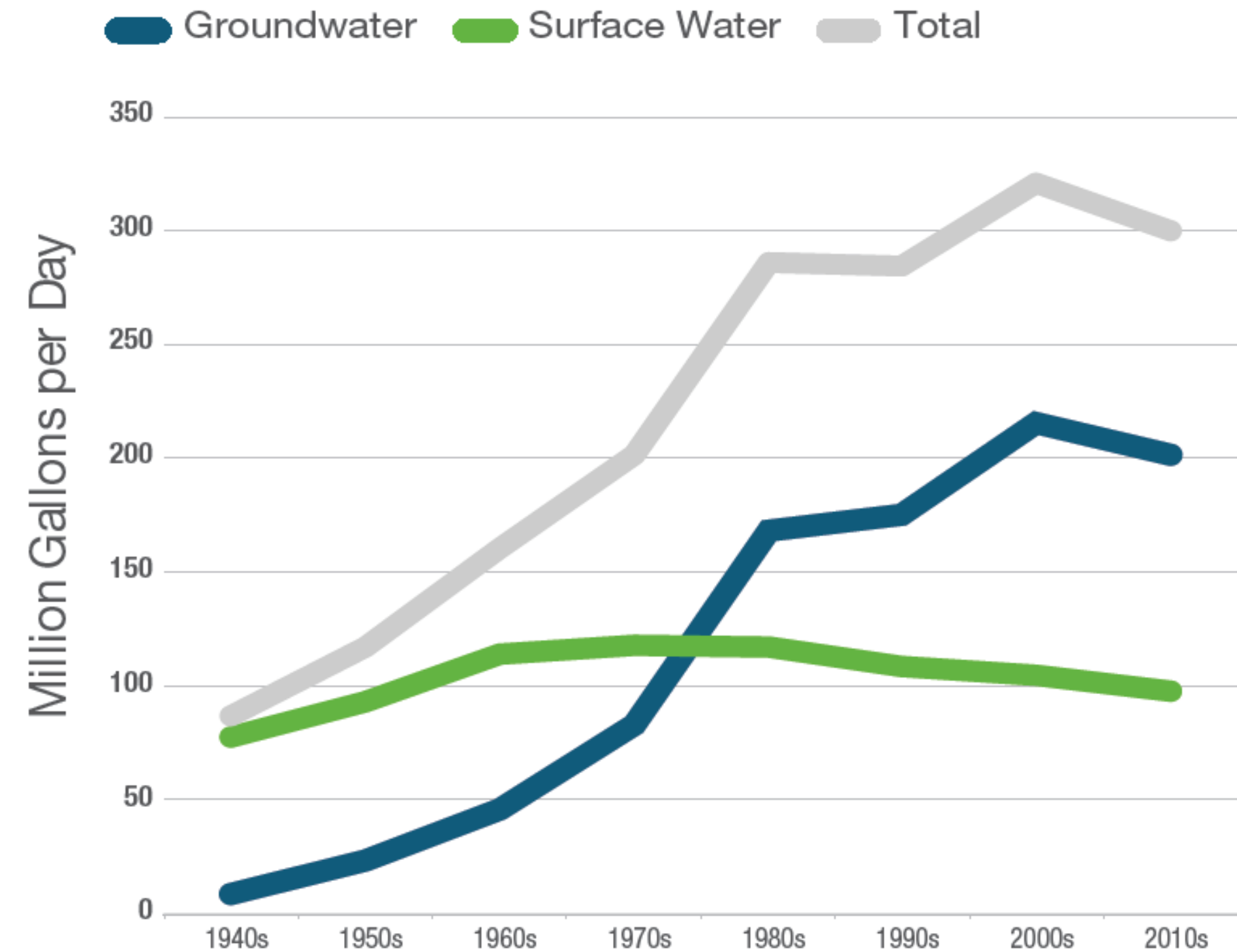


Examples of Results

Communities participating in subregional water supply work groups:

20 communities in 2005 versus 72 communities in 2002

40 communities receiving grants to establish local water efficiency rebate programs



Next Step

- Submission of the final report to the Minnesota Legislature as part of Minnesota Water Plan – September 15, 2020

Questions

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