

Recommendations: Water Quality & Contamination

Emily Steinweg, Senior Engineer, MCES Water Supply Planning

Lanya Ross, Environmental Analyst, MCES Water Supply Planning

TAC Meeting: April 20, 2021



PRE-WORK: Info shared by committee members

Nomination & Prioritization Research

- [MDH Contaminants of Emerging Concern \(CEC\) Program \(video\)](#)
- [MDH Health Risk Limits](#)

PFAS

- [SWnewsmedia 'Forever chemicals' leaked into groundwater by local landfills \(article\)](#)
- [MPCA "What are PFAS?" \(2 min video\)](#)
- [ECHA "How is the EU making sure PFAS chemicals don't stick around?" \(2 min video\)](#)
- [Clean Water Action "PFAS Chemicals are putting our health at risk" \(12 min video\)](#)

Chloride

- [U of M "The Changing Earth: Chlorides in Water" includes softeners, road salt, ag \(3 min video\)](#)
- [MPCA Smart Salt Training Program \(3 min video\)](#)
- [MPCA library of statewide chloride resources](#)
- [PLOS ONE 'Centralized softening as a solution to chloride pollution' \(2021 article\)](#)

Groundwater monitoring data

- [MDH drinking water quality](#)
- [MDH consumer confidence reports](#)
- [MPCA groundwater quality data](#)
- [DNR groundwater level data](#)
- [MDA agricultural monitoring and assessment](#)
- [MC environmental information management system](#)

Community data

- [MC Community Profiles](#)
- [MC Rethinking Areas of Concentrated Poverty](#)
- [MPCA Understanding environmental justice](#)

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.

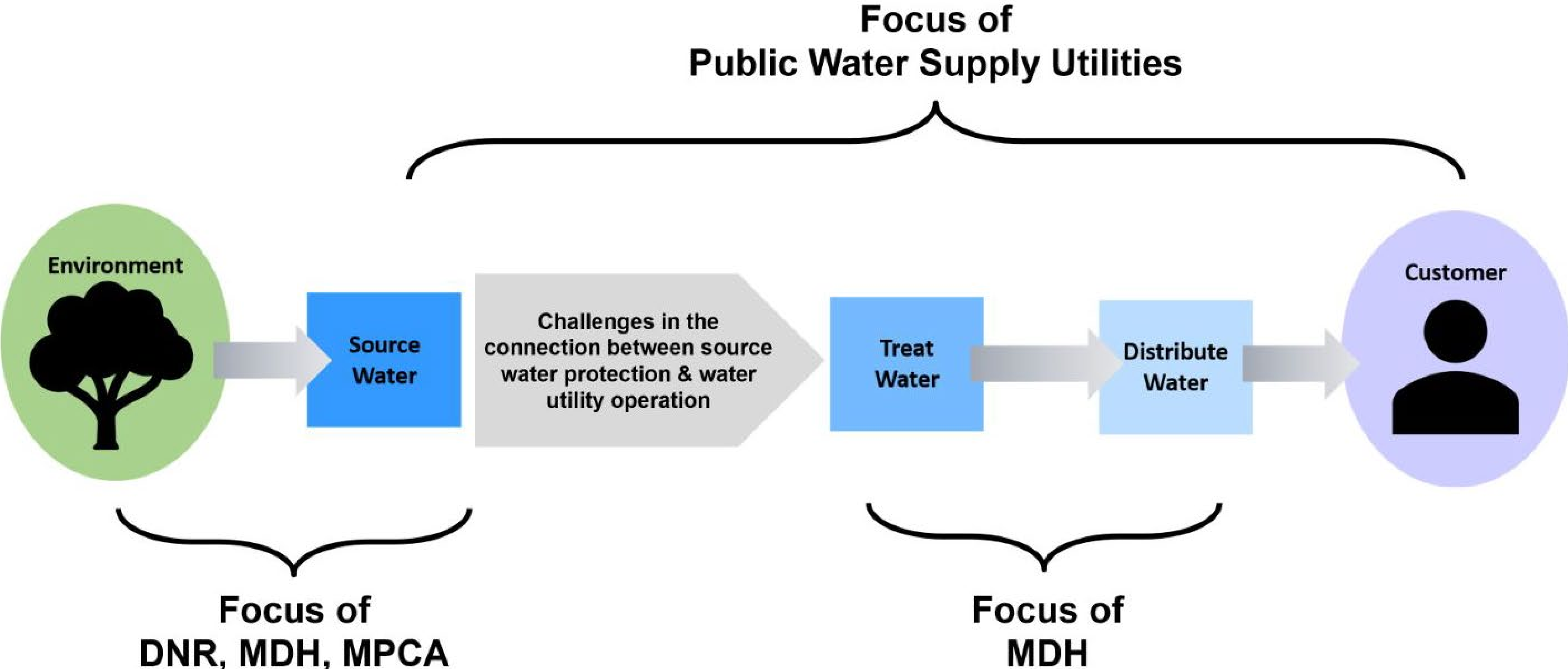
Work together:

Share information for MAWSAC to consider at their next meeting, related to potential recommendations in the area of water quality and contamination.

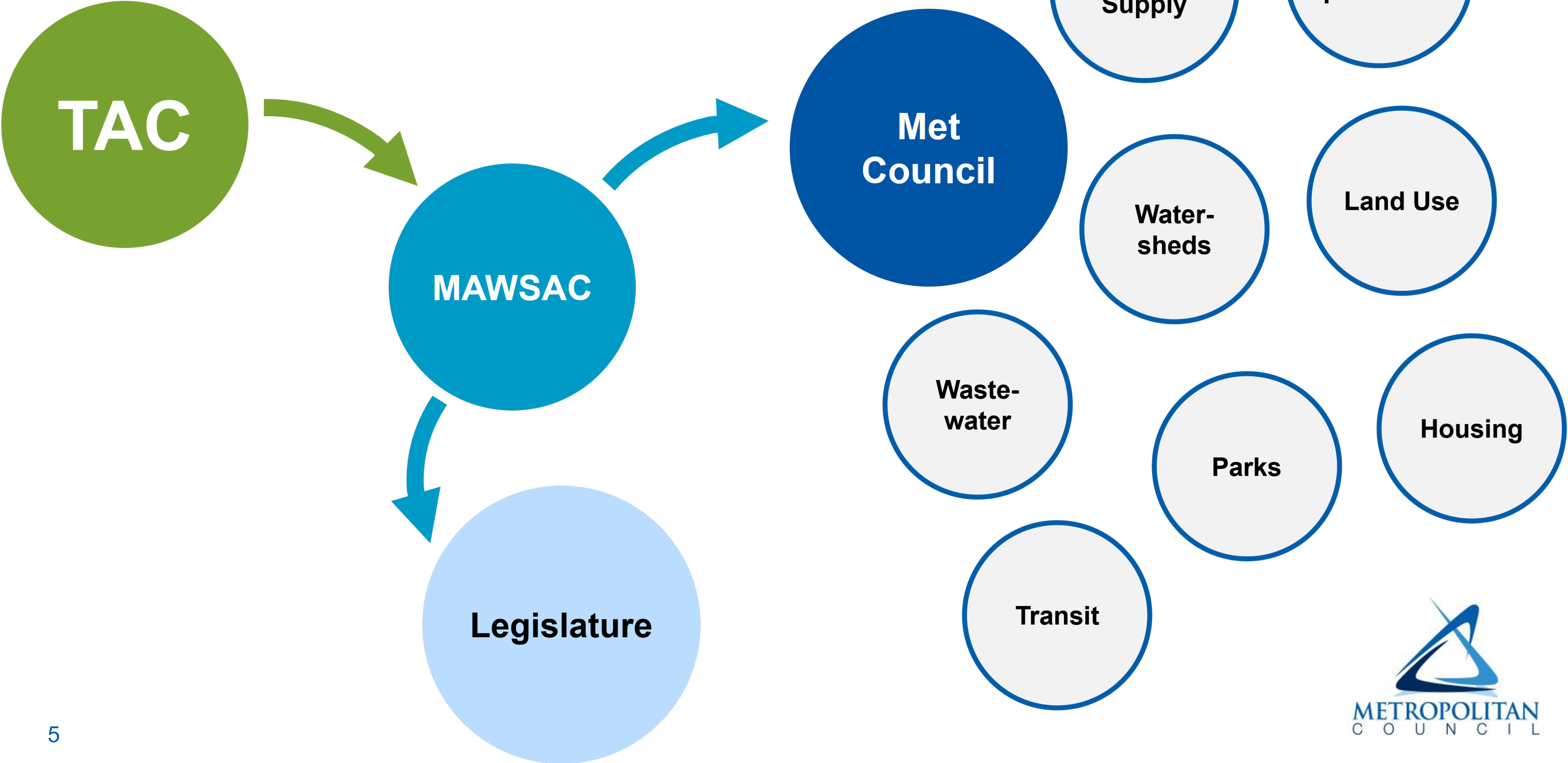
Approach:

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

How can Metropolitan Council help?



Roles and responsibilities



WATER QUALITY & CONTAMINATION

DRAFT RECOMMENDATIONS

Problem or need

There is always the potential of another contaminant emerging in our water supply. As a region, we are not always logistically best prepared to prevent spread or be responsive when new sources of contamination are discovered.

Goal

MAWSAC and TAC would like all the region's changing communities to be prepared for new, emerging contaminants and empowered to continually work to provide a safe water supply. The MAWSAC, under advisement of the TAC, recommends that, to achieve this outcome, the Metropolitan Council and the State of Minnesota support a framework to maintain equitable, long-term, integrated water approaches developed collaboratively by communities, water utilities, and regulators.

Solutions

- **Regulatory** – *develop and support coordinated protocol to address new contamination challenges*
- **Outreach, engagement, training** – *consumer confidence campaign, tabletop emergency response training, & private well education*
- **Financial support** – *funding available to fill monitoring gaps, reduce risks, & respond to unexpected events*
- **Research** – *enhance monitoring and data accessibility, subregional feasibility studies, survey citizens' perspectives*
- **Regional policies & planning** – *integrated water management, considering multiple scenarios and extended planning horizons*

Challenges describe the regional context

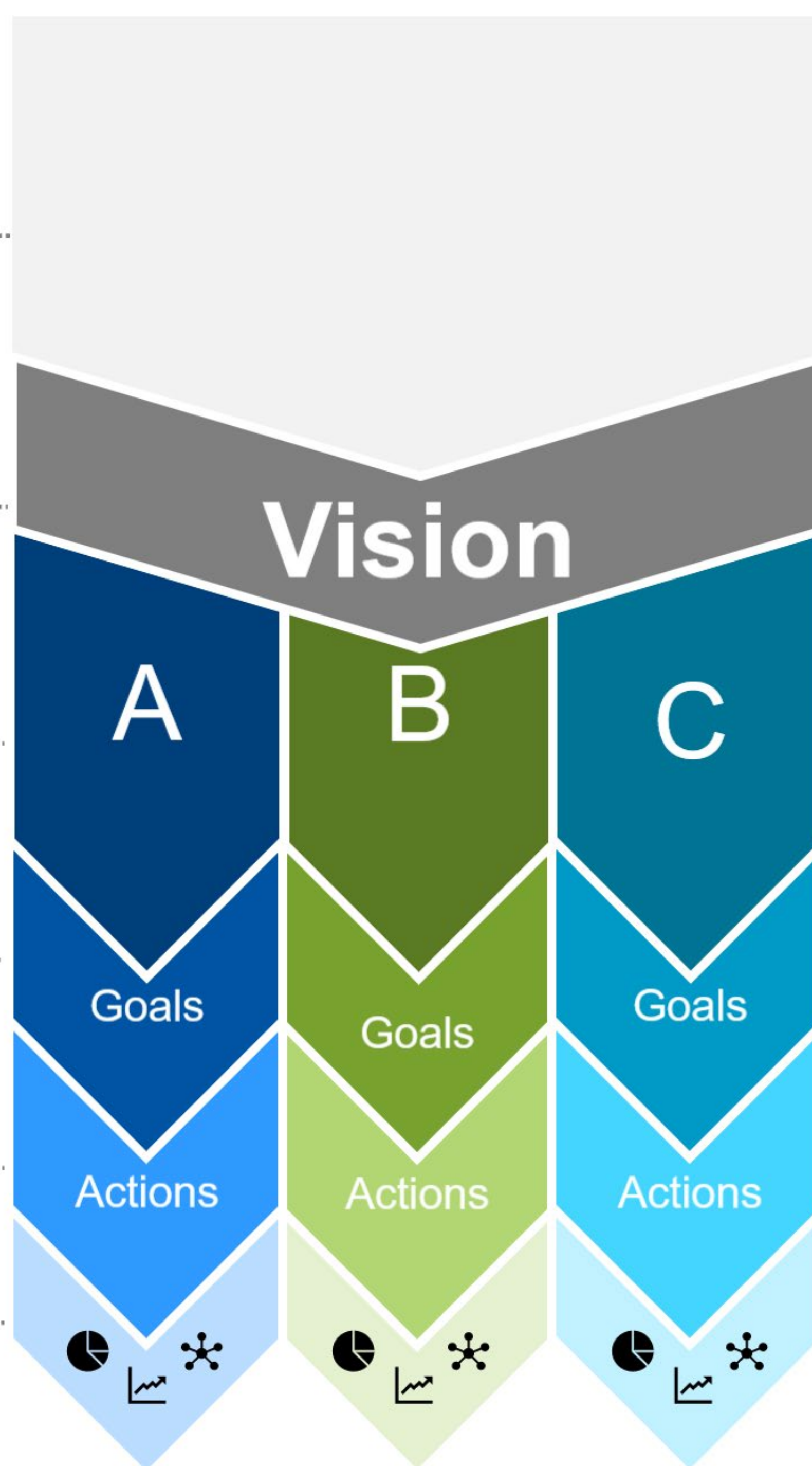
The community-led vision articulates our aspirations for the region

The work is organized into multiple focus areas where impacts are most feasible

Goals set across the Council's responsibilities to drive progress

Specific actions are defined with roles for both Council and partners

Dashboard metrics to track progress



For illustration:
**Recommendation
framework provides
a place for all
ideas...**



Definition: water supply sustainability



Maximize use of infrastructure investments



Maintain protected surface water flows



Maintain aquifer levels & manage flow directions



Combination of efficiency/conservation, groundwater, surface water & reuse



Align agency directions on all aspect of water



Recognize uncertainty & seek to minimize risk

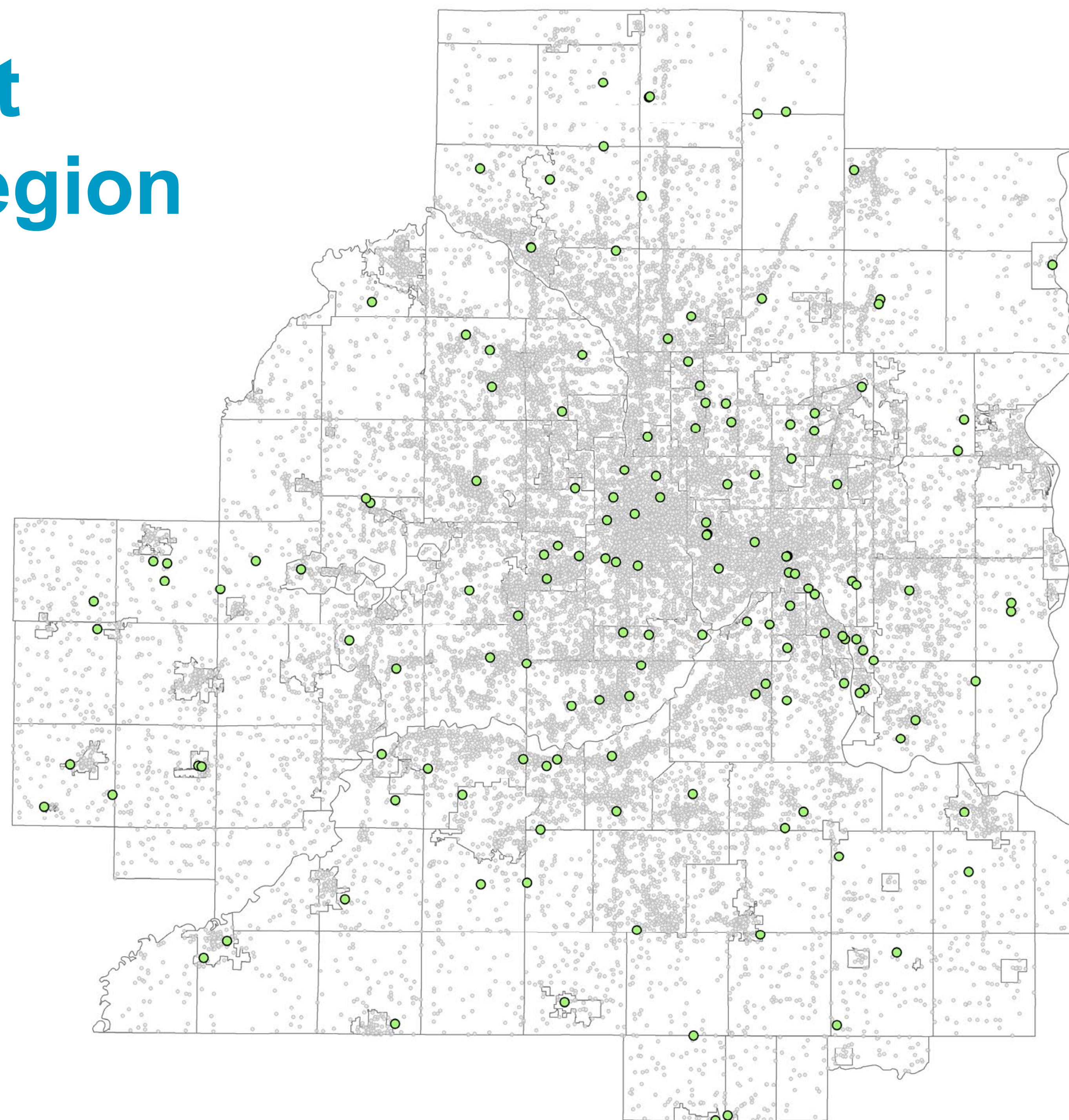
Potential contaminant sources across the region

MPCA What's In My Neighborhood Sites

● Solid waste

● All other sites

□ Community



Explore more about the communities where these sites are located:

- [MC Community Profiles](#) (dashboard)
- [MC Rethinking Areas of Concentrated Poverty](#) (map)
- [MPCA Understanding Areas of Environmental Justice](#) (map)

Local experiences – food for thought

- **Manganese in a public water supply system** – Bruce Westby, City of Ramsey
- **Landfill risks and a multi-community public water supply system** – Brad Larson, City of Savage
- **Example(s) of non-point, man-made water supply contamination such as nitrate**

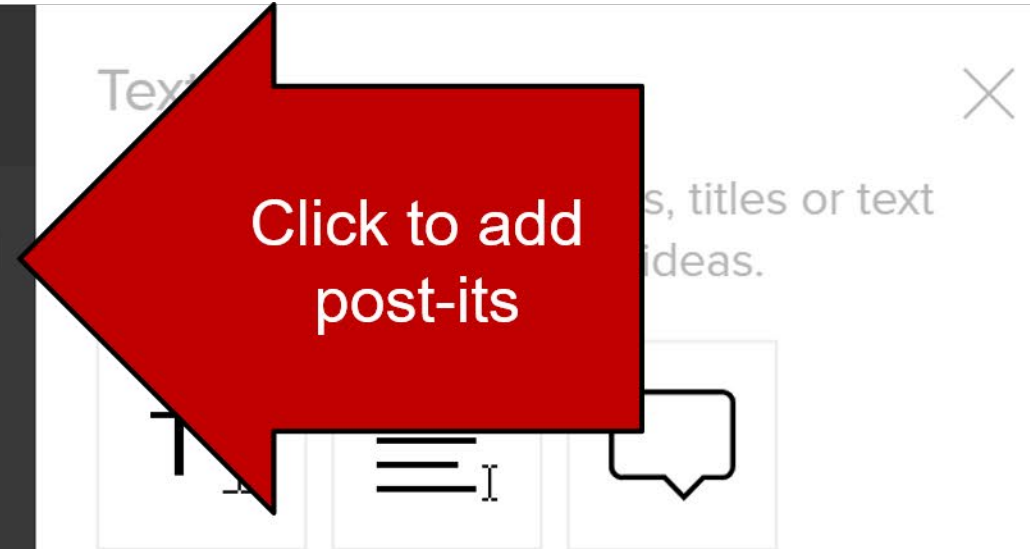
QUESTIONS

1. What was the problem or challenge, and what impacts were most concerning?
2. What regulatory trade-offs or tensions shaped the work?
3. What was needed to be better prepared?
4. What is the level of consumer confidence in different groups?
5. How could the Council and/or organizations represented on TAC help?


Question and answer



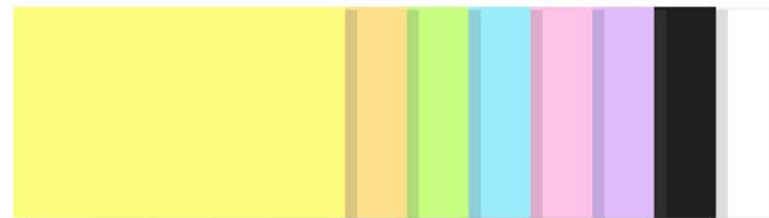
Mural introduction




3x3 STICKY NOTE



5x3 STICKY NOTE



CIRCLE STICKY NOTE



TAC April 2021 Facilitator

SHARE

All changes saved

Problem Statement

Consider the proposed problem statement and share your 'gut reaction':

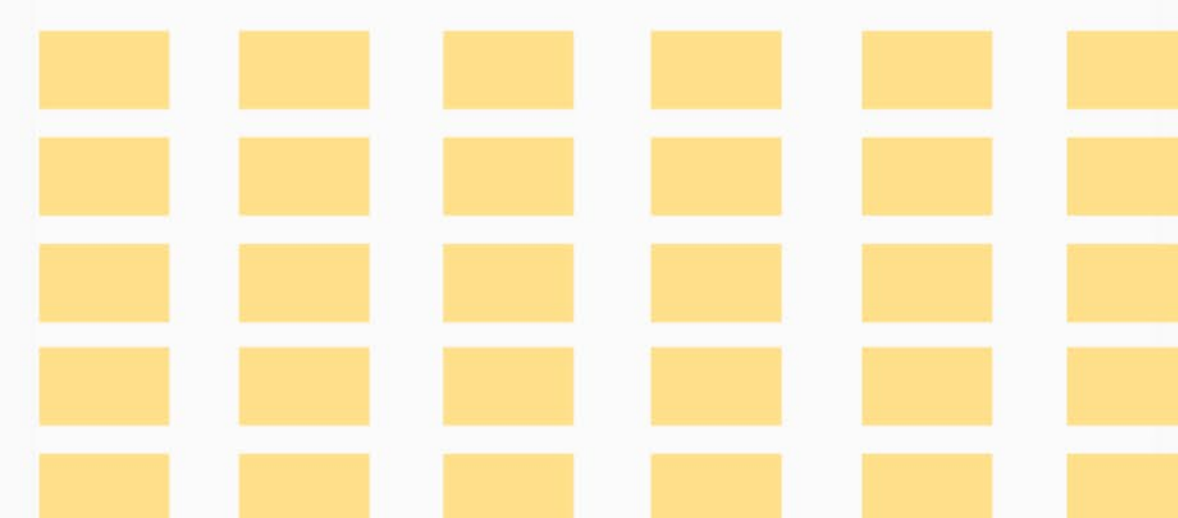
There is always the potential of another contaminant emerging in our water supply. As a region, we are not always logistically best prepared to prevent spread or be responsive when new sources of contamination are discovered.

MAWSAC recommends that Metropolitan Council with partners DO THESE ACTIONS like equitably monitor for risks, incorporate uncertainty into infrastructure investment planning, support cooperative emergency response planning, and build consumer confidence in water utilities and regulatory entities so that OUTCOMES.

8	7	6	5	4	3	2	1
ENDORSEMENT "I like it."	ENDORSEMENT WITH A MINOR POINT OF CONTENTION "Basically, I like it. A change or addition might make it better."	AGREE WITH RESERVATIONS "I can live with it."	ABSTAIN "I have no opinion. I need a question answered or this does not affect me."	STAND ASIDE "I don't like this, but I don't want to hold up the group."	FORMAL DISAGREEMENT BUT WILLING TO GO WITH THE MAJORITY "I want my disagreement noted in writing, but I'll support the decision."	FORMAL DISAGREEMENT WITH REQUEST TO BE ABSOLVED OF RESPONSIBILITY "I don't want to stop anyone else, but I don't want to be involved in implementing it."	BLOCK "I veto this proposal."

Offer a revised problem statement on the sticky notes below. What would you strongly support?

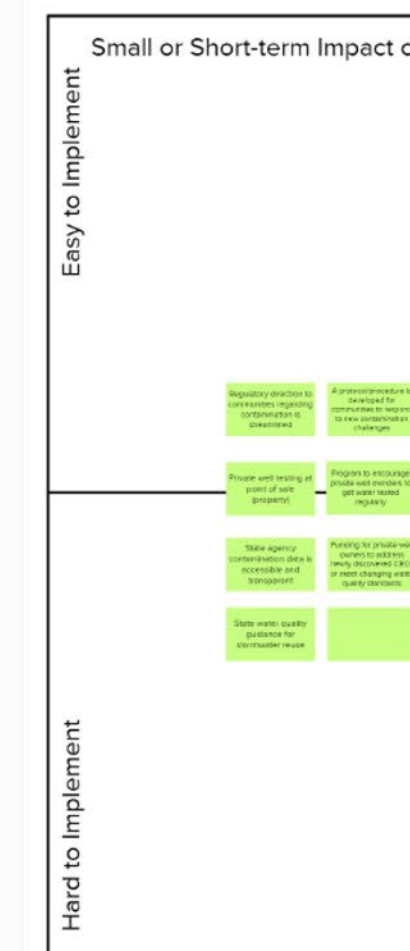
a. What are the current challenges with this topic?
b. How would you like things to be? What is your vision?
c. What happens or what opportunities do we miss if we don't change?



Which revisions do you want to highlight? (Vote)

Prioritizing Solutions

Small or Short-term Impact on C



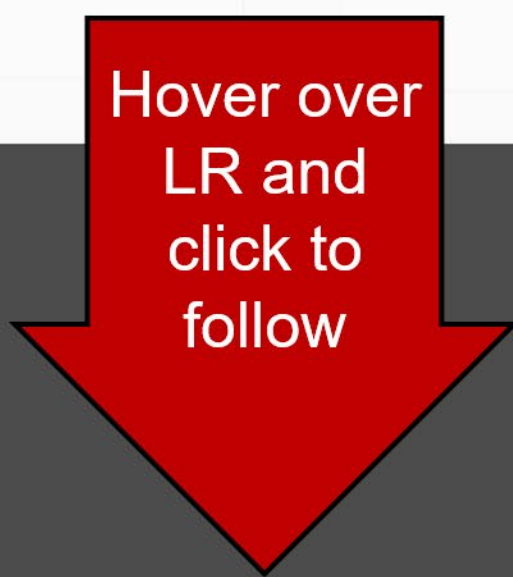
Hard to Implement

Easy to Implement

6%

Zoom settings

LR



Outline

- 1 Consider the Problem**
1. Briefly read and consider the propose problem statement. Do you love it? Hate it? Just
- 2 Revise the Problem**
1. Please offer an alternative problem statement, or a revision of the proposal. How
- 3 Prioritizing Solutions**
1. Read the proposed solutions and consider how well they will help achieve the goal(s)
- 4 Assigning Responsib...**
Who should take the lead on these solutions? Who is a critical partner?



Mural exercise

- a) Review and offer revision of the current draft problem description and goal
- b) Brainstorm and prioritize solutions
- c) Reflection

Next steps

- Share TAC perspectives with MAWSAC
 - What we focused on
 - What questions
 - Changes to the proposed recommendation
- Begin drafting report
- Plan for next TAC meeting about Land Use + Water Supply on June 15, 2021
 - What worked? I wish...

Questions

Emily Steinweg

Senior Engineer, MCES Water Supply Planning

Emily.Steinweg@metc.state.mn.us

651-602-1516

Lanya Ross

Environmental Analyst, MCES Water Supply Planning

Lanya.Ross@metc.state.mn.us

651-602-1803

