Recommendations:
Land Use and Water Supply

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TAC meeting: June 15, 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:

- Key source water protection **laws and rules**
- **Land use** and **landscape** information
- MDH **source water** protection program
- Examples of **collaborative approaches**
- Examples of Metropolitan Council **technical assistance** (grant programs & guidance)
- Examples of **local source water** protection work
- **Groundwater monitoring data**
- **Community Data**

Committee members are encouraged to share useful and interesting resources!

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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 land use and water supply connections.

Approach:

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

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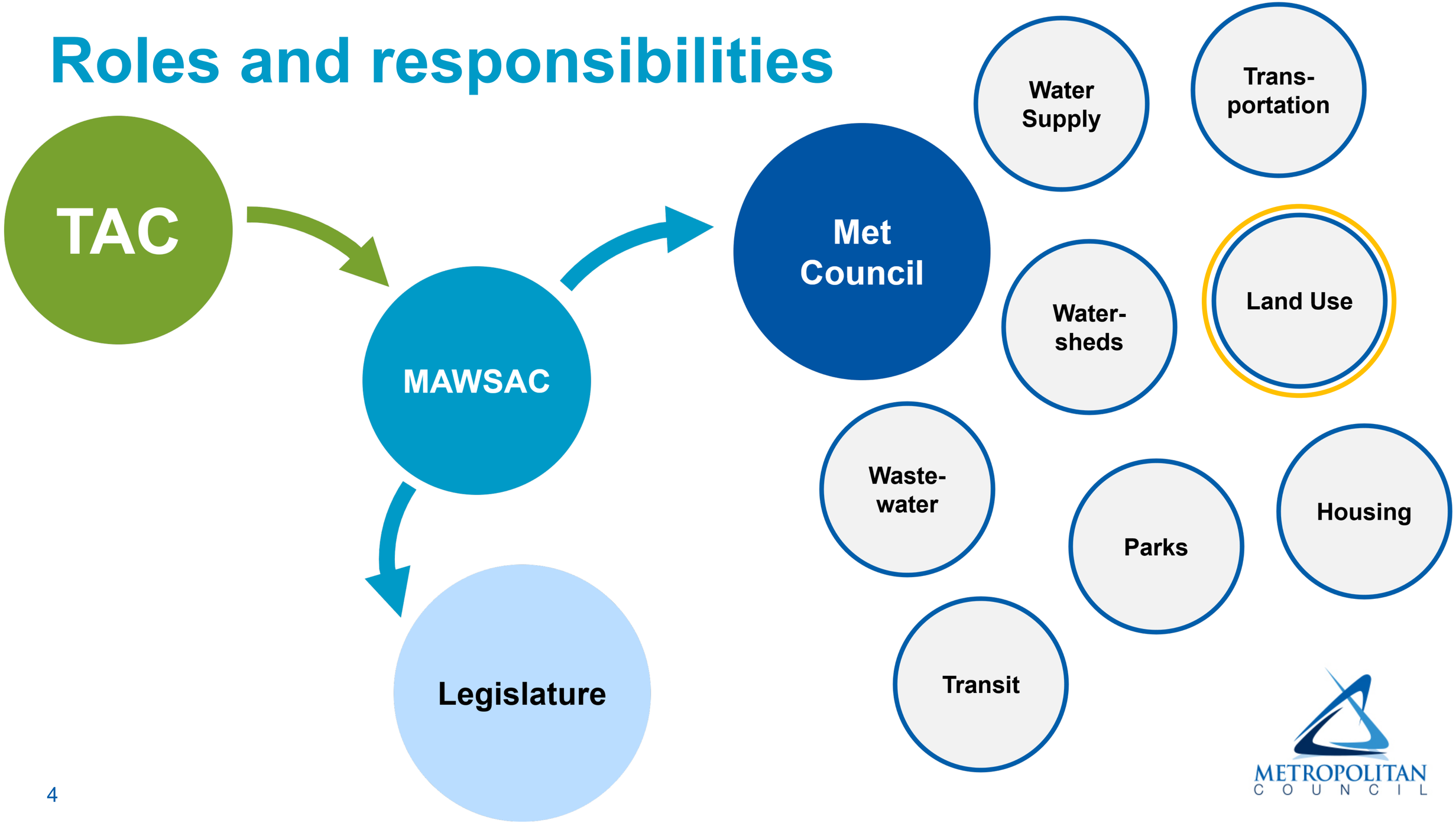
Roles and responsibilities



LAND USE & WATER SUPPLY

DRAFT RECOMMENDATIONS

Problem or need

Many of our current water quality problems came about because we didn't realize the implications of our land use – and related industrial and commercial waste – years ago. We have opportunities to make choices now with our current land use that help prevent the kind of legacy contamination that past land use practices have caused.

Goal

The TAC, serving at the pleasure of the MAWSAC, recommends that the MAWSAC, with the Metropolitan Council and the State of Minnesota, promote actions so that public water suppliers have tools and are empowered to work with land use planners and developers to protect the quantity and quality of critical source waters. Local actions that protect source water need to be better understood, coordinated, and incentivized in the region. Forethought in land use planning today provides opportunities to prevent contamination in the future.

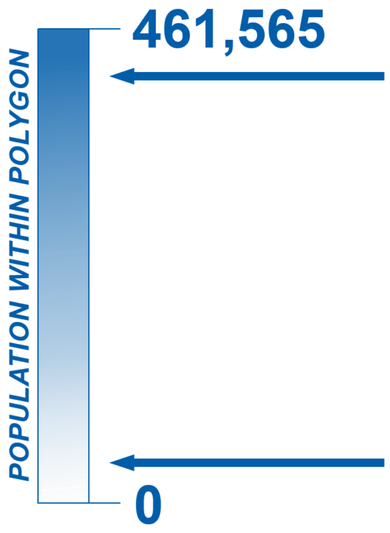
Solutions

- **Financial support** – *funding available for sub-regional wellhead protection, land use practices for sustainable water supply*
- **Outreach, engagement, training** – *subregional collaboration and local planning assistance for wellhead protection*
- **Research** – *enhance monitoring and data accessibility, wellhead delineation, water supply risk mapping, and cost benefit analyses*
- **Regulatory** – *Wellhead protection plans in comprehensive plans, revised wellhead rules*
- **Regional policies & planning** – *water supply embedded in metropolitan development guide and regional policies, updated expectations for local water supply and comp plan content*

Land Cover and Associated Potential Contaminant Sources

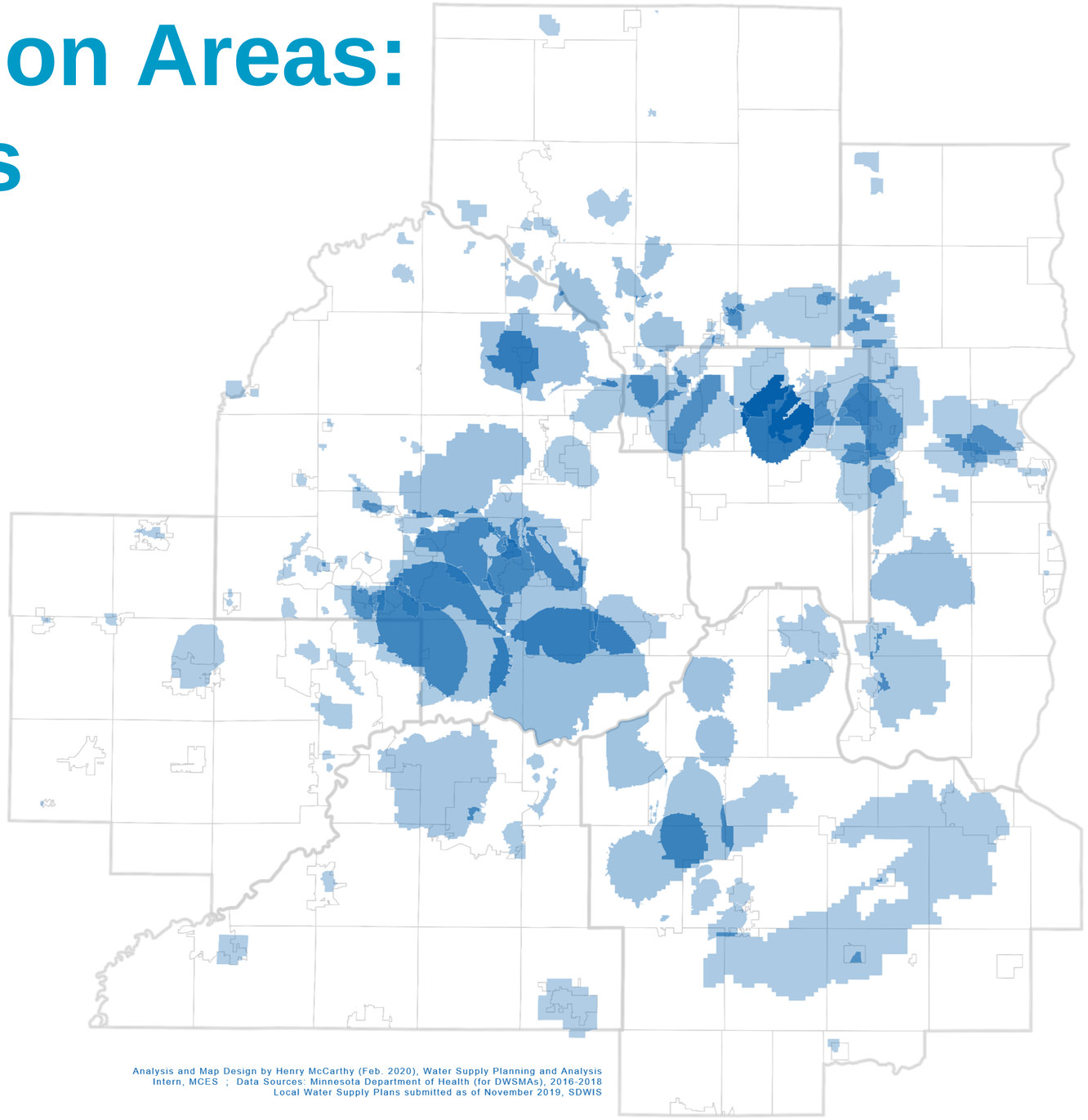
LAND COVER	POTENTIAL CONTAMINANT SOURCE
Forest	• At this time, there are no potential contaminate sources identified
Barren land	• Mining, pit (aggregate), stormwater runoff
Wetlands and Open Water	• Stormwater runoff, road or rail crossing over water
Hay/Pasture/Cultivated Crops	• Land application, nutrient application/management, feedlots, storage and preparation areas
Developed - Open Space	• Wells, septic systems, turf management, chemical application and storage
Developed - Low and Medium Intensity	• Wells, septic systems turf management, chemical application and storage, stormwater basins/drains/infiltration, stormwater runoff, above ground storage tanks, class V wells, transportation corridor
Developed - High Intensity	• Wells, septic systems turf management, chemical application and storage, stormwater basins/drains/infiltration, stormwater runoff, above ground storage tanks, class V wells, transportation corridor, road and rail crossings (spills over water), solid waste management site, pipeline, gravel pit, suspected contaminant of concern, hazardous waste handler and/or generator

Source Water Protection Areas: Groundwater Supplies



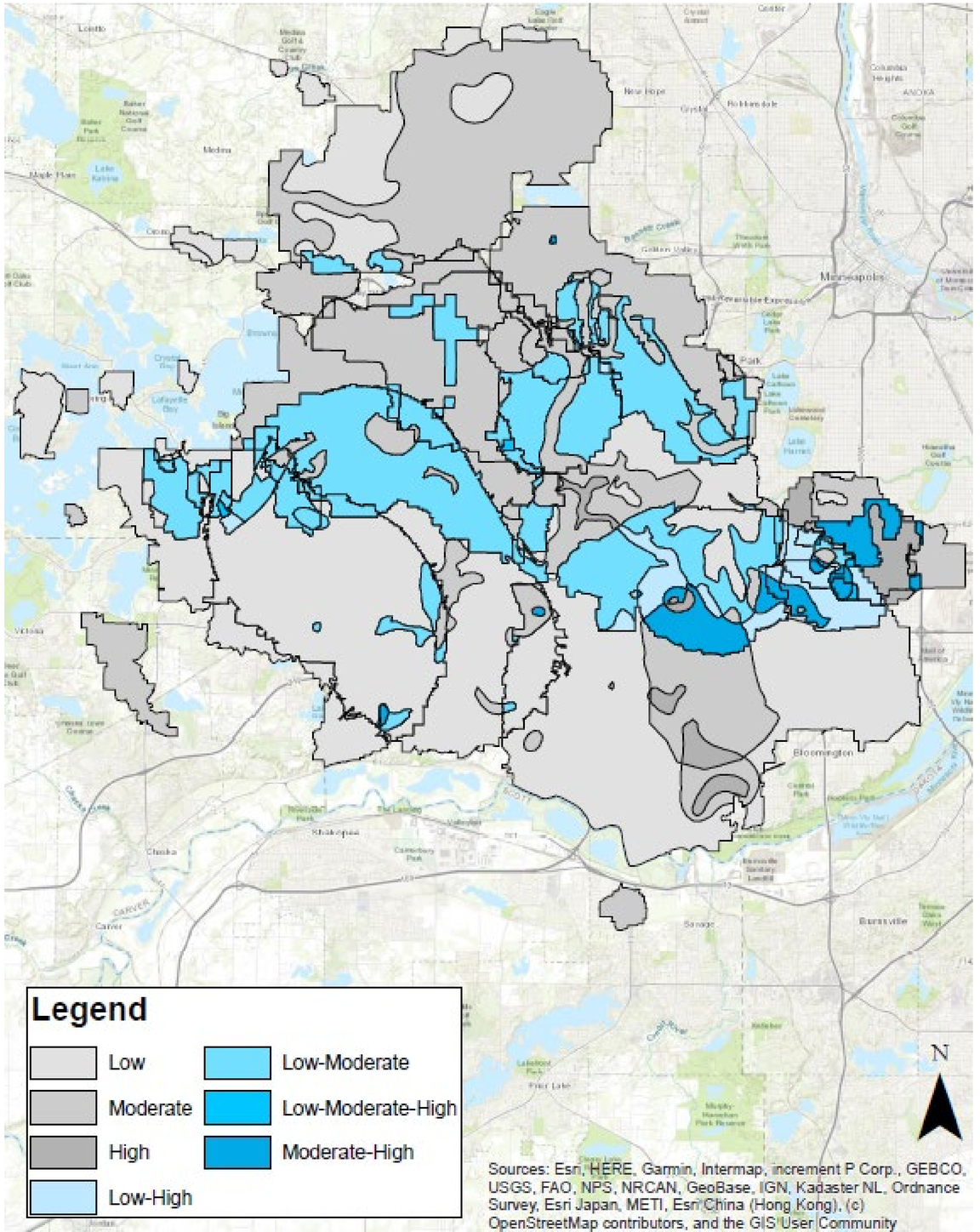
Some areas contribute to drinking water for more than 400,000 people (St. Paul and its overlapping areas)

Other areas contribute to populations as small as 203 people (East Bethel)



Analysis and Map Design by Henry McCarthy (Feb. 2020), Water Supply Planning and Analysis Intern, MCES ; Data Sources: Minnesota Department of Health (for DWSMAs), 2016-2018 Local Water Supply Plans submitted as of November 2019, SDWIS

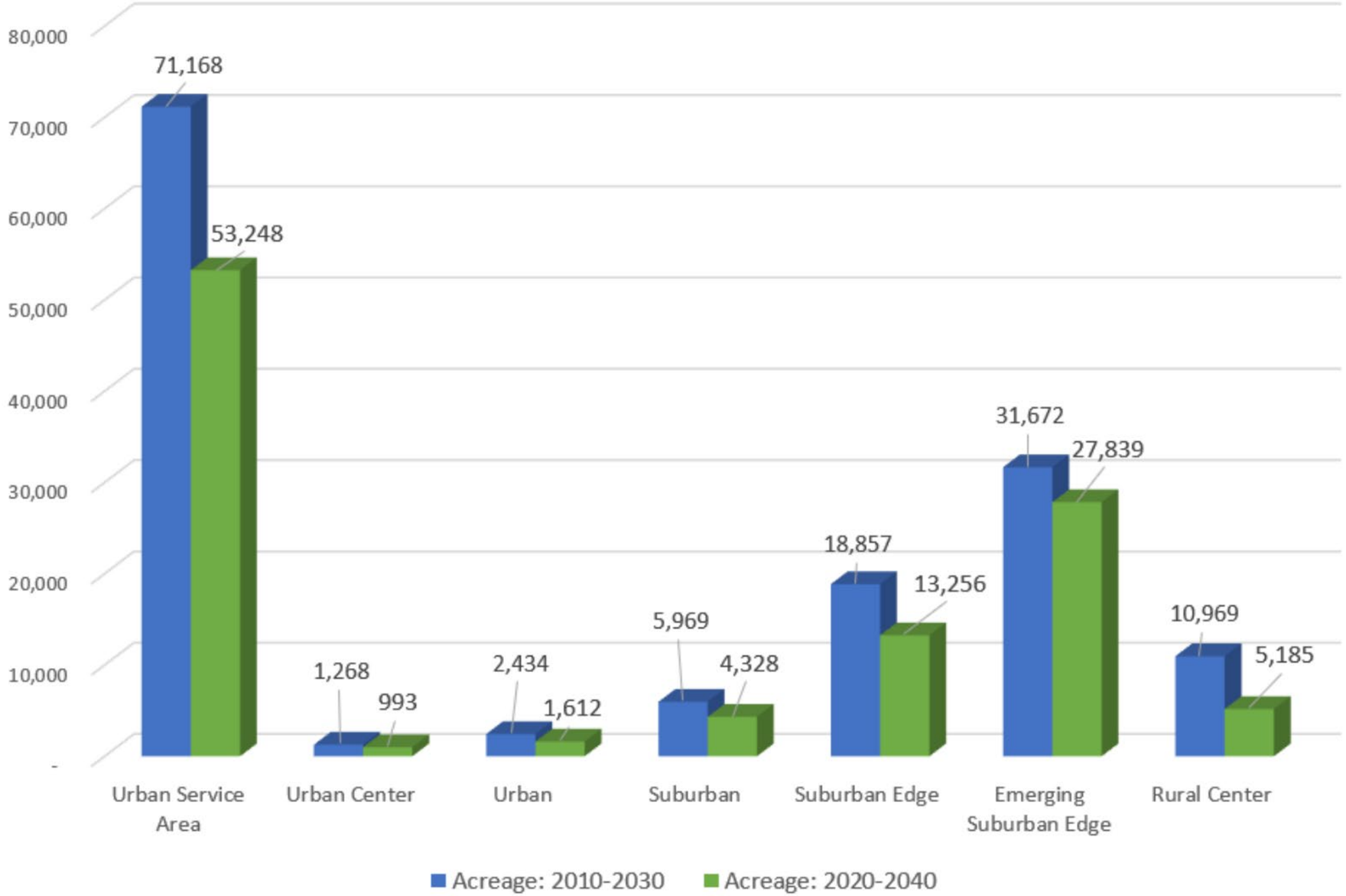
Overlapping Source Water Protection Vulnerability Assessment & Implementation



Land Supply Comparison: Comp Plan Analysis

To hear the presentation that this slide came from:

[Agenda - Metropolitan Council (metrocouncil.org)]



Local experiences – food for thought

- **Source Water Protection Implementation -** City of Edina
- **West Metro WHPP Pilot** – Metropolitan Council
- **Collaborating around source water protection** – Dakota County

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?

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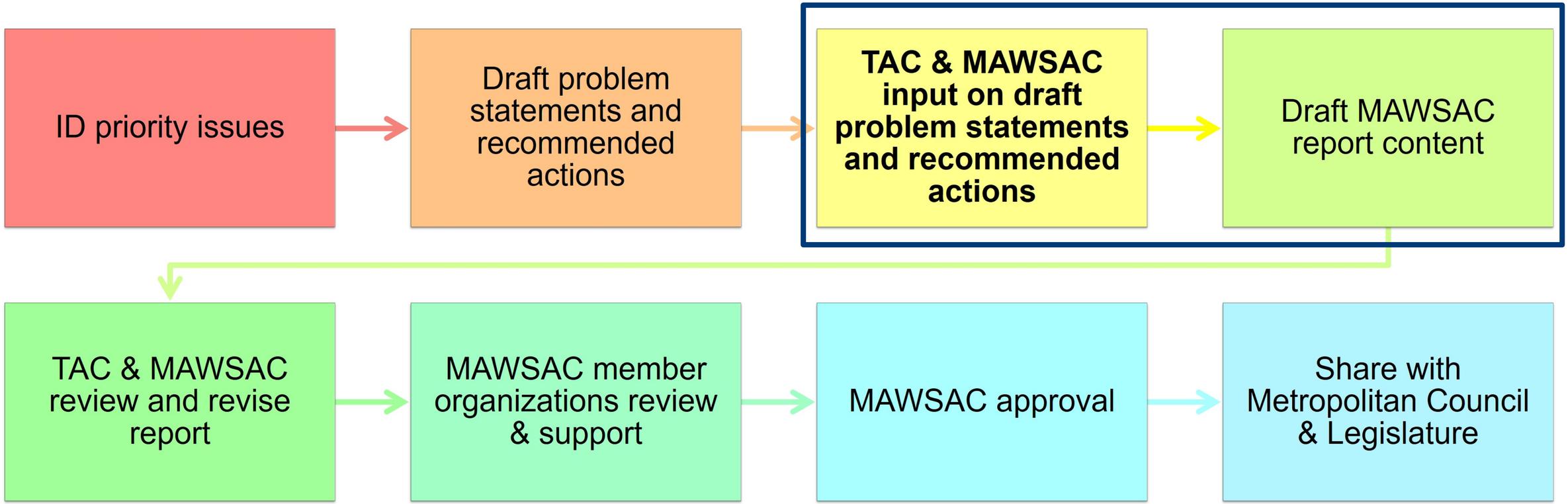
Approach to 2022 MAWSAC report



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Questions

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