



Water Policy Research Project

Environment Committee Informational Item



September 12, 2023 | Jen Kostrzewski & Emily Schon

Agenda



Water planning overview

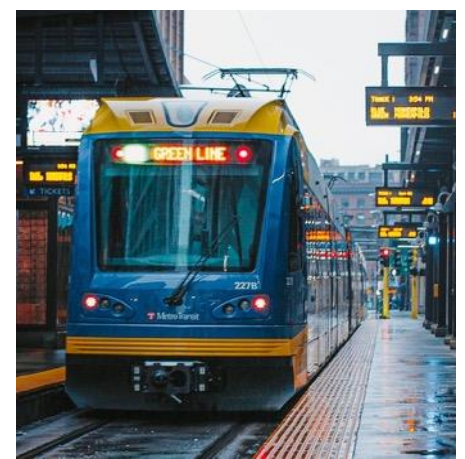
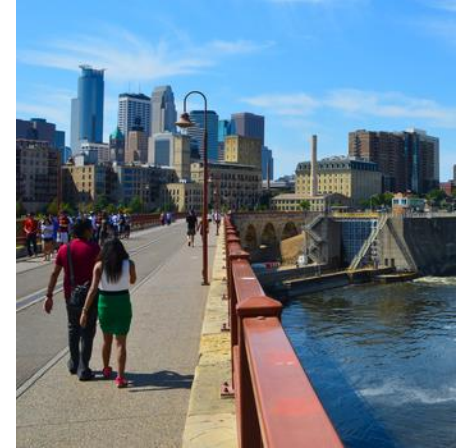


Wastewater planning
and service
considerations

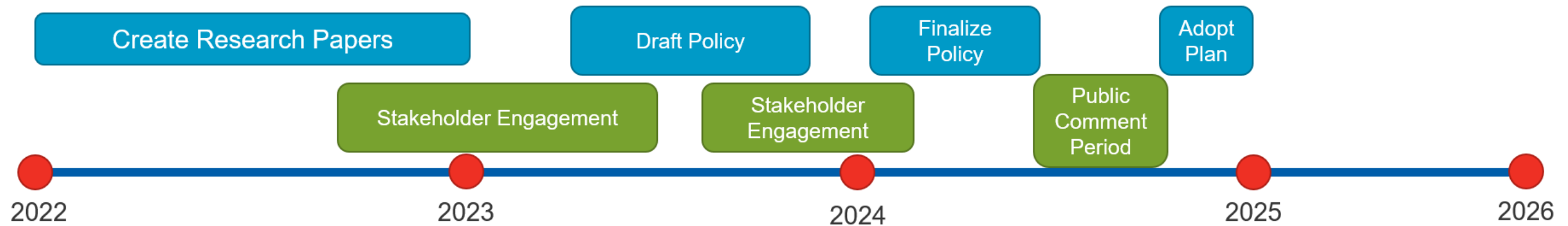
Water Resource Policy Plan (WRPP)

Plan Purpose

- Met Council is developing the 2050 Water Resources Policy Plan, which **focuses on ensuring sustainable water resources in the region**. It is a part of and informed by the Regional Development Guide.
- The WRPP provides a **framework for integrative water planning** (wastewater, water supply, and water resources) the Metro Area Water Supply Plan, and the Wastewater System Plan.
- It contains water **policies, strategies, and actions** for both the Met Council and our 180+ local governments within the seven-county region.
- WRPP policies **will commit the Council** to take action in the areas of long-range visioning and planning, regional system investments, facility management, technical assistance, research and assessment, and partnerships.



2050 WRPP Timeline

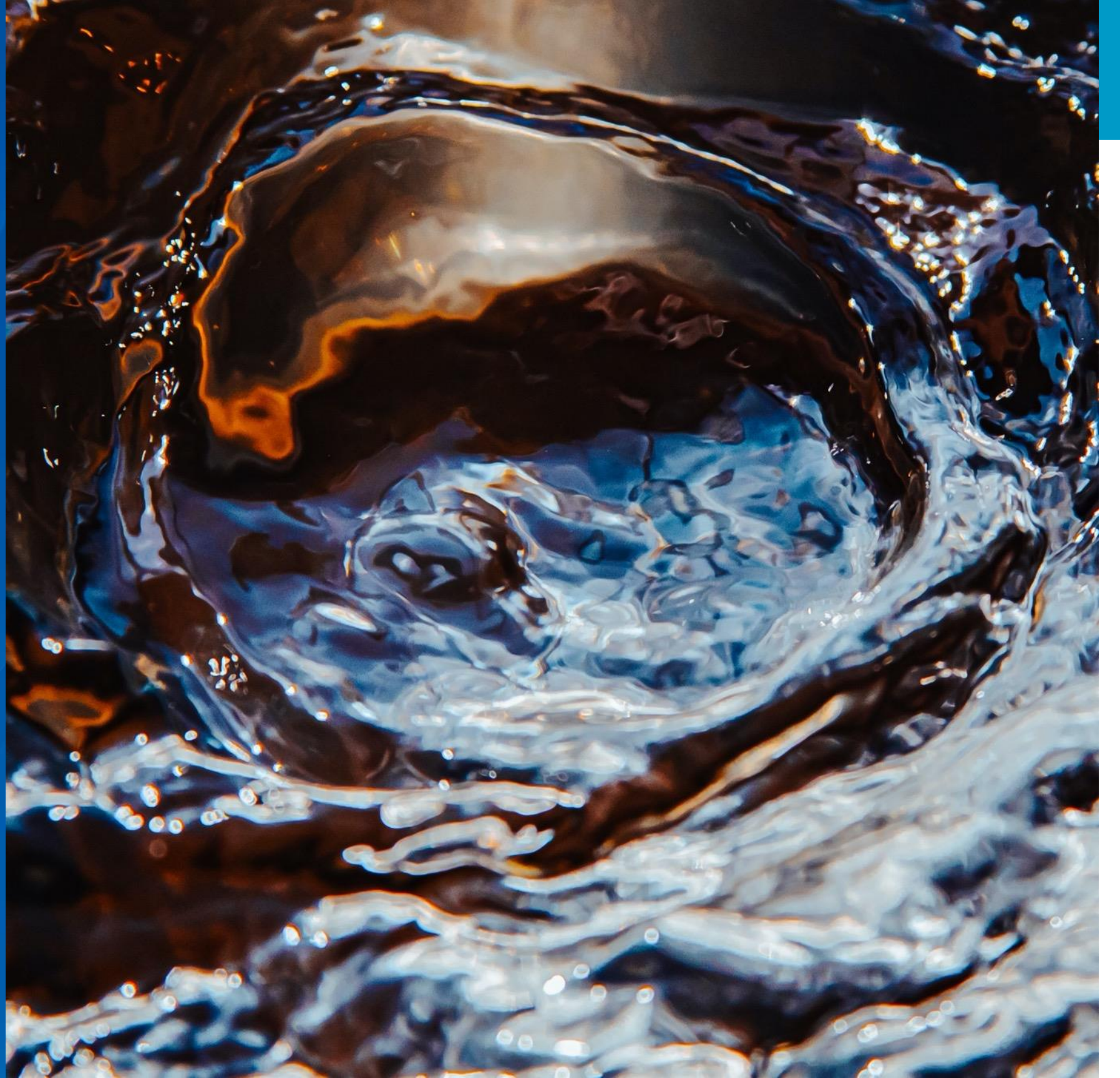


WRPP Research Topics

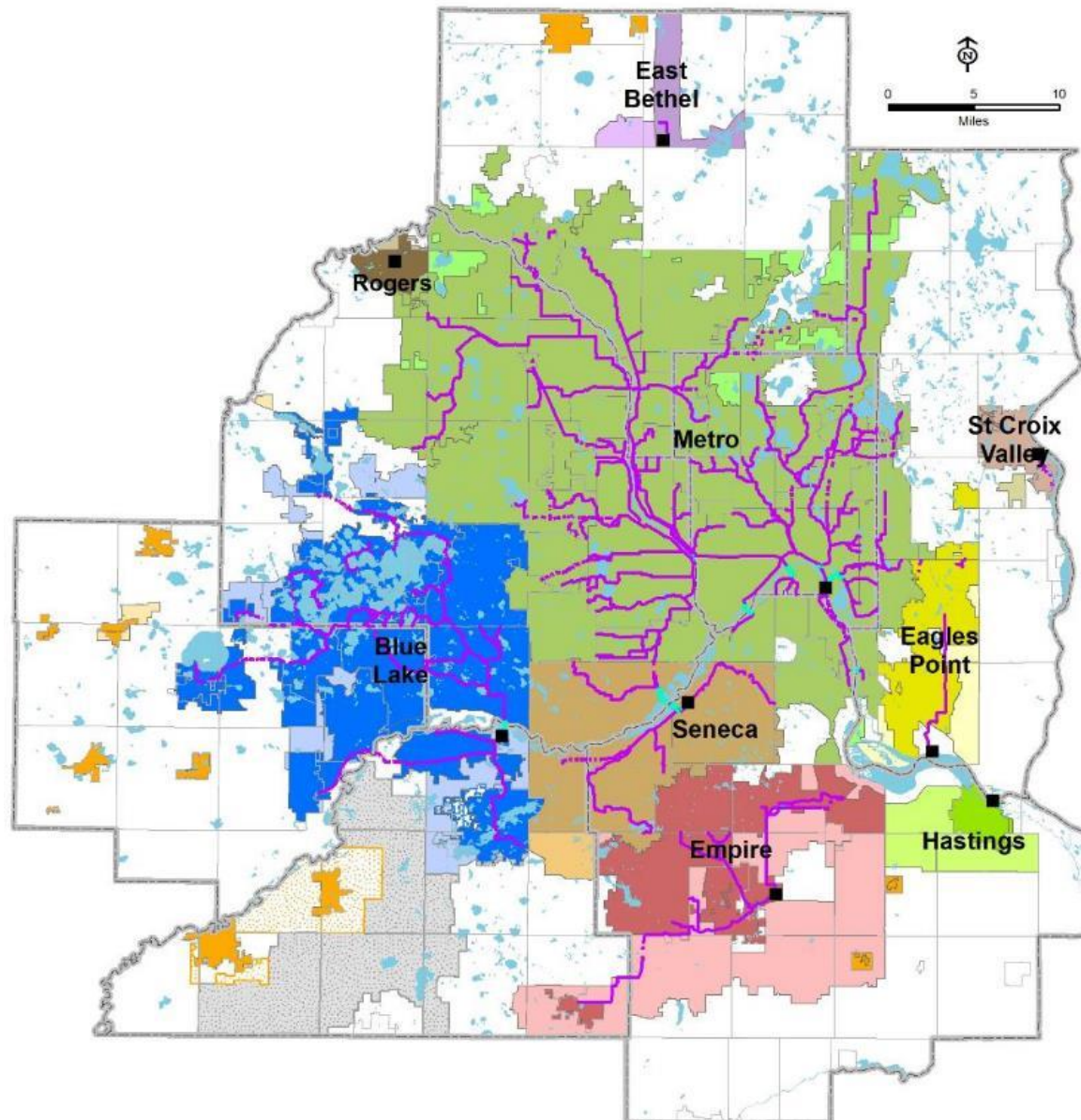


1. Water Reuse
2. Water and Climate
3. Rural Water Concerns
- 4. Wastewater Planning and Service Considerations**
5. Water Quality
6. Protecting Source Water Areas
7. Water Availability, Access, and Use

Wastewater planning and service considerations



Met Council wastewater system



Protects public health and safety



Protects the environment



Fosters the economic growth of the region

WHO WE SERVE

- 7-county twin cities metro area
- 111 communities
- 2,800,000+ people

OUR FACILITIES

- 9 wastewater treatment plants
- 61 pump or lift stations
- 640 miles of interceptors
- 250 million gallons per day (avg)

OUR ORGANIZATION

- 600+ employees
- \$7 billion in valued assets
- \$150 million/year capital program

Wastewater planning and service considerations issue statement



Aging infrastructure is expensive to repair and maintain. If neglected, it can allow excess surface or subsurface water to enter the conveyance system and take up capacity otherwise reserved for growth. Adjusting wastewater treatment methods and technologies to meet changing nutrient limits is costly. Growth of the region will result in more users of the wastewater treatment system, leading to requested acquisition of local infrastructure and generating debate on how best to manage the wastewater treatment of the region.

Our treatment plants continue to achieve near perfect compliance with federal and state water discharge standards while keeping rates competitive. However, it is important to address upcoming challenges to maintain that level of service. Planning for and mitigating these concerns will help extend the life of the regional wastewater system, ensuring the growth of a healthy and prosperous region.

Key Messages



- The Council will continue to provide high quality, affordable, and sustainable wastewater collection and treatment, which is necessary to support environmental protection and a growing, prosperous region with high quality of life.
- We will continue to prioritize regulatory compliance while anticipating emerging contaminants that may require the Council to meet additional treatment standards.
- Inflow and infiltration (I/I), in part a result of aging infrastructure, consumes precious system capacity and may increase with climate change. We will continue our efforts to mitigate I/I in the regional system while working with community partners to address local sources, including incentivizing private property I/I reduction through technical and financial (grants) assistance.
- The Council will serve the region's wastewater treatment needs while remaining mindful of the impact our facilities may have on communities. We will strive to build and rehabilitate facilities in an equitable way while engaging traditionally underrepresented communities in the planning and construction process.

What is our role?



Regional Wastewater Collection & Treatment

We partner, plan, and provide services to protect our region's water. We develop plans to preserve and manage the region's water resources. We collect and reclaim wastewater at our nine regional treatment plants. Every day we process 250 million gallons of wastewater collected by over 600 miles of large sewer pipes from 111 communities.

These efforts help us meet our statutory obligations to provide wastewater services to the entire 7-county area and meet permit requirements.

Key issues (1)

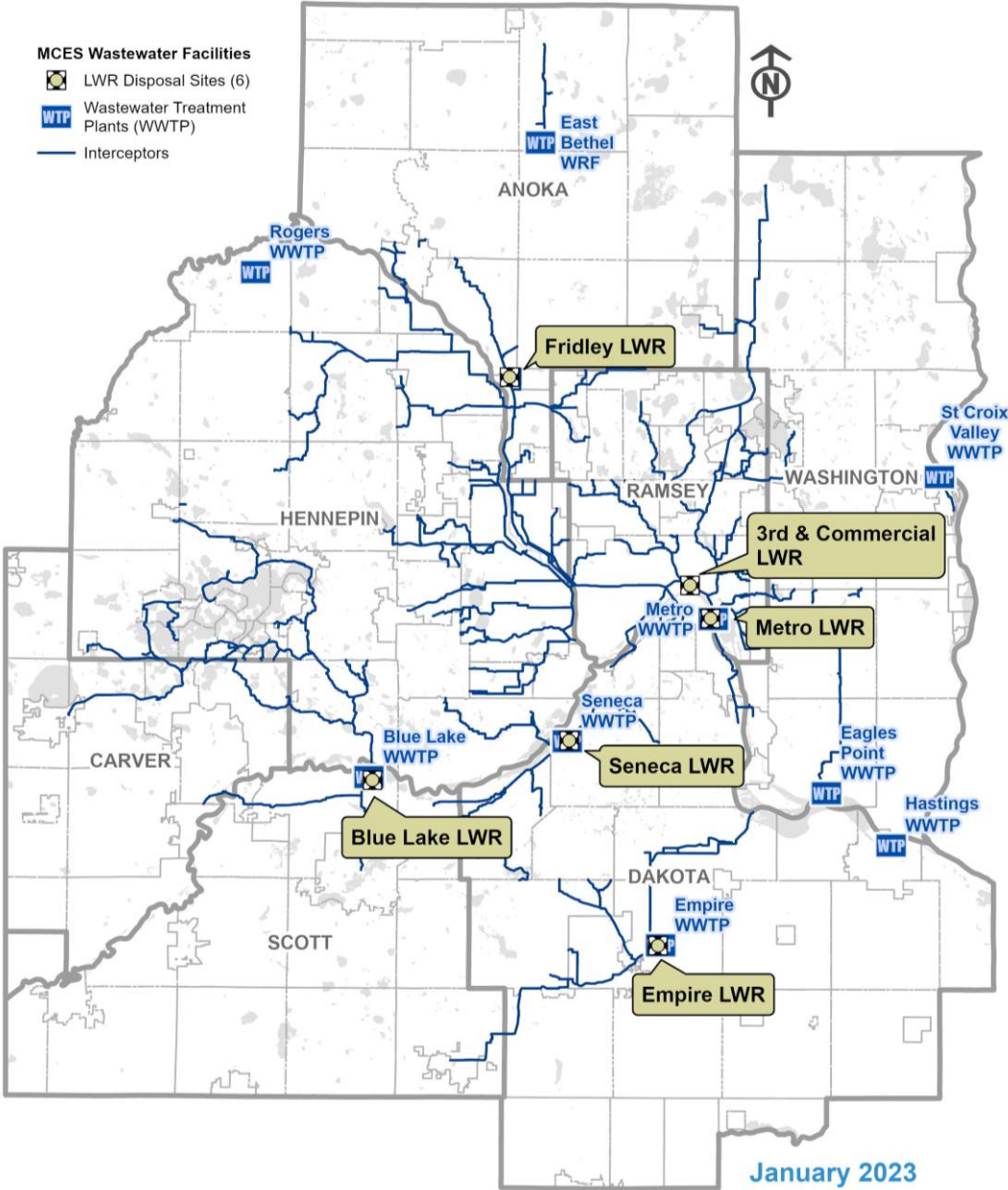
- Inflow and infiltration
- Vector waste receiving
- Liquid waste receiving
- Requested acquisitions of rural wastewater treatment plants
- Contaminants of regulatory concern
- Centralized versus decentralized wastewater planning
- Wastewater surveillance

Key Issue (2) – Inflow and Infiltration

- Metropolitan Council has been able to **defer capacity improvements, estimated at \$1B**, that would have been required had I/I not been addressed.
- Regional population has increased by 12% between 2005 – 2019 which has been accommodated within the existing regional collection system, despite increase in annual precipitation.
- Local communities, through their 2040 Comprehensive Sewer Plan submittals, indicate that **at least 50% of I/I comes from private property.**



Key Issue (3) – Liquid and Vactor Waste



Current policy

Policy on Wastewater Sustainability

Policy on Private Wastewater Systems

Policy on Serving the Rural Area

Policy on Investment

Policy on Inflow and Infiltration

Policy on Water Conservation and Reuse

Policy on Wastewater System Finance

Policy on Serving the Urban Area

Recommendations (1) – New Policy



Wastewater Surveillance

“The Met Council will support efforts to investigate if or how Environmental Services can assist in wastewater surveillance in the interest of public health insights, when the need arises and funding is available. The Met Council will continue to partner with public health agencies to remain aware of when the Met Council can provide insights.”

Recommendations (2) – New Policy



Contaminants of Regulatory Concern

“The Met Council will continue to partner, engage, and provide expertise in the research and regulatory work for contaminants of regulatory concern. The Met Council will continue participating in conversations with other public agencies to stay on top of emerging contaminants and any changing regulatory requirements.”

Recommendations (3) – New Policy

Nitrogen

The Met Council will continue to engage with stakeholder groups in the development of both potential ammonia water quality standards and the Minnesota Nutrient Reduction Strategy. We will provide resources and expertise to other agencies working towards the same goal.

Polyfluoroalkyl Substances (PFAS)

Source reduction within the sewershed is currently the best available strategy for mitigation. The Met Council will:

- *Develop communication tools to address this complex and quickly evolving topic.*
- *Continue internal development of PFAS knowledge.*
- *Develop risk-based priorities for accelerated actions, for example, focused source reduction at wastewater treatment plants with land application programs.*
- *Where appropriate support PFAS research related to wastewater treatment plants.*

Recommendations (4) – Reinstated Policy



Interceptor Ownership Transfer

“Interceptors and related facilities for the collection, treatment, and disposal of sewage in the metropolitan area that are no longer needed to implement the regional wastewater system plan will be reconveyed, abandoned, or sold to the appropriate local governmental unit pursuant to statutes.”

Recommendations (5)

Water Conservation and Reuse

“The Council will work with our partners to identify emerging issues and challenges for the region as we work together on solutions that include the use of water conservation, wastewater and stormwater reuse, and low-impact development practices to promote a more sustainable region.”

Although no additional implementation actions are suggested here, we acknowledge that decreasing water consumption is an effective way to preserve or recapture hydraulic wastewater system capacity. The Met Council will continue to support efforts and relationships to reduce water consumptive use.

Recommendations (6)

Serving the Rural Area

*“The Met Council will acquire wastewater treatment plants owned by Rural Centers, based upon their request through the comprehensive plan and comprehensive sewer plan processes, **if the requested acquisition:***

- *Provides cost-effective service*
- *Accommodates assigned growth*
- *Protects public health and wellbeing*
- *Currently meets or, with improvements can meet, environmental and regulatory requirements.*

In addition, customer input must be solicited and a public hearing on the request must be conducted.”

Proposed Actions:

- Consider providing a higher level of service for liquid waste haulers by investigating adding and maintaining liquid waste receiving sites.
- Partner with state agencies to discuss subsurface sewage treatment system disposal facilities and rural access to disposal sites.

Recommendations (7)

Private Wastewater Systems

“Communities that permit the construction and operation of subsurface sewage treatment systems and other private wastewater treatment systems within their communities are responsible for ensuring that these systems are installed, maintained, managed, and regulated consistent with Minnesota Pollution Control Agency rules. The Council will not provide financial support to assist communities if these systems fail.”

Proposed Action:

- The Met Council will give higher priority to service extensions in those areas with subsurface sewage treatment systems that have a higher likelihood of contaminating source water protection areas through spills or underperforming systems.

Recommendations (8)

Investment

“The Council will strive to maximize regional benefits from regional investments.”

Proposed Actions:

- Perform cost/benefit analyses, including environmental impact studies, if customers express a need for a higher level of service, for example, opening or reopening a liquid waste disposal site, to ensure all waste is efficiently and effectively processed and all rate payers have access to reasonable and appropriate levels of service.
- Consider future infrastructure investments with an equity and environmental justice perspective to minimize impacts and leave the community with something better than what they had.

Recommendations (9)

Wastewater Sustainability

“The Council will provide efficient, high-quality, and environmentally sustainable regional wastewater infrastructure and services.

The Council shall conduct its regional wastewater system operations in a sustainable manner as is economically feasible. Sustainable operations relate not only to water resources but also to increasing energy efficiency and using renewable energy sources, reducing air pollutant emissions, and reducing, reusing, and recycling solid wastes.”

We are currently considering the Met Council’s new Climate Action Work Plan to determine how it may impact and guide our new policy on wastewater sustainability.

Recommendations (10)

Inflow and infiltration

*“The Met Council will not provide additional capacity within its interceptor **and treatment systems** to serve excessive inflow and infiltration.*

The Met Council will establish inflow and infiltration goals for all communities discharging wastewater to the regional wastewater system. Communities that have excessive inflow and infiltration in their sanitary sewer systems will be required to eliminate the excessive inflow and infiltration within a reasonable time period.”

Proposed Actions

- Continue to support, advocate, and coordinate with Metro Cities for state bond funding for municipal public system inflow and infiltration grants.
- Advocate for dedicated and reliable funding for private property inflow and infiltration mitigation and pursue grant program recommendations from the 2023 Private Property Inflow and Infiltration Task Force.
- Consider direction from the Climate Action Work Plan when considering climate impacts on inflow and infiltration.

Recommendations (11)

Finance

“The Council will continue to implement regional wastewater service fees and charges based on regional cost of services and rules adopted by the Council.”

Proposed Actions:

- Collaborate with partner organizations who advocate for and assist with household water and wastewater affordability.
- Continue Sewer Availability Charge (SAC) loan programs for small businesses (new or expanding) and qualifying existing residential connections to the Metropolitan Disposal System.

Discussion questions



1. Are we missing any crucial concerns?
2. Have any of your district cities or townships raised concerns or questions regarding wastewater conveyance or treatment or our policies?
3. Do you, committee members, have any unanswered questions?

Thank you

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