Clean Water Council Meeting Agenda
Monday, December 16, 2024
9:00 a.m. to 2 p.m.

IN PERSON at MPCA offices in St. Paul with Webex Available (Hybrid Meeting)

9:00 Regular Clean Water Council Business

- **(INFORMATION ITEM)** Introductions
- **(ACTION ITEM)** Agenda - comments/additions and approve agenda
- **(ACTION ITEM)** Meeting Minutes - comments/additions and approve meeting minutes
- **(INFORMATION ITEM**) Chair, Committee, and Council Staff update
    - Policy Committee Update
    - Budget and Outcomes Committee Update
    - Ad Hoc Outreach Group Update:
        - Tribal liaisons meeting; biennial report section
    - Staff update
        - Legislative update
        - Lessard-Sams Outdoor Heritage Council leadership meeting
        - Story map and fact sheet update
        - Process and timeline on hiring for new Administrator
        - Biennial report to the Legislature

9:30 (INFORMATION ITEM) Presentation on November Budget Forecast

- Ryan Merz, Executive Budget Officer, Minnesota Management and Budget

10:00 BREAK

10:30 (ACTION ITEM) Budget & Outcomes Committee Final Recommendations

- Steve Besser, BOC Chair

11:30 (ACTION OR INFORMATION ITEM?) Other Existing Policy Statements for Platform

- The Council approved policy statements for drinking water protection and drainage. However, we have several other existing policy statements that are still valid and would be included in our biennial recommendations.

12:00 Lunch

12:30 (INFORMATION ITEM) White Bear Lake Area Comprehensive Plan Update

- Jason Moeckel, Minnesota Department of Natural Resources
- Judy Sventek, Metropolitan Council

1:15 (FEEDBACK REQUESTED) Topics for 2025

1:45 Public Comment

2:00 Adjourn

Steering Committee Meets Directly After Adjournment

wq-cwc2-24l

Clean Water Council
November 18, 2024, Meeting Summary

Members present: John Barten (Chair), Steve Besser, Rich Biske (Vice Chair), Dick Brainerd, Gail Cederberg, Steve Christenson, Tannie Eshenaur, Warren Formo, Brad Gausman, Kelly Gribauval-Hite, Justin Hanson, Holly Hatlewick, Annie Knight, Sen. Nicole Mitchell, Jason Moeckel, Ole Olmanson, Jeff Peterson, Peter Schwagerl, Marcie Weinandt, and Jessica Wilson.
Members absent: Rep. Josh Heintzeman, Rep. Kristi Pursell, Glenn Skuta, Peter Kjeseth, and Sen. Nathan Wesenberg.
Others present: Margaret Wagner (MDA), Judy Sventek (Met Council), Jim Stark (SWMP), Chris O'Brien (Freshwater), Jeff Anderson (Voyageurs project), Sharon Doucette (BWSR), Trevor Russell (Friends of the Mississippi River), Annie Felix (BWSR), Julie Westerlund (BWSR), Brad Jordahl Redlin (MDA), Carly Griffith (MCEA), Sophia Walsh (MDA), Amy Zipko (House GOP staff), Suzanne Rhees (BWSR), Sheila Vanney (MASWCD), Lucas Sjostrom (Milk Producers), Frieda VanQualen (MDH), LeRoy Ose (Red Lake Watershed District), Cameron Gaspard, Marcey Westrick (BWSR), Ryan Hughes (BWSR)

To watch the Webex video recording of this meeting, please go to https://www.pca.state.mn.us/clean-water-council/meetings, or contact Brianna Frisch.

Regular Clean Water Council Business
- Introductions
- Motion to approve the November 18th meeting agenda by Dick Brainerd, seconded by Steve Christenson. Motion carries.
- Motion to approve the approve October 21st meeting minutes by Dick Brainerd, seconded by Steve Christenson. Motion carries.
- Chair, Committee, and Council Staff Update
  - Policy Committee Update
  - Budget and Outcomes Committee Update
  - Ad Hoc Outreach Group Update: Margaret Wagner set up a meeting at the Interagency Coordination Team (ICT) with agency tribal liaisons on November 26th. The goal is to understand how we can engage Tribal Governments without overburdening them.
  - Staff Update
    - The Governor's Office would like to make our three appointments all at once.
    - The budget forecast must come out by December 6, and we hope to have a Clean Water Fund balance by the December 6th BOC meeting. Uncertainty is likely for the February forecast due to a new federal administration. The MN House is tied. Perhaps the Legacy bill will be easier to pass.
    - Paul Gardner gave an update on the Clean Water Fund story map.
    - We should have a draft biennial report at the December meeting.
    - The position description for Administrator is being reviewed with a goal to post it by February 1. The goal is a start date of May 1, with some overlap with Paul for a month.
    - Members suggested a retreat to review the Council's work. The BOC also mentioned working on a scoring rubric. There was a desire for a more formalized process with the state agencies.
    - A few additional maps as a follow-up to the Upper Mississippi Basin presentation are available.

Review and Possible Approval of Policy Statements from Policy Committee *(Webex 00:46:00)*
- Rich Biske reviewed how Council policy statements can influence policy makers. Sometime statements don't involve the Clean Water Fund, which we know is not enough. Policy complements funding. We vet these policy statements and include outside opinions and expertise. Statements can change over time.
- Drainage Policy Statement highlights:
  - Identify more opportunities for multipurpose drainage management and water storage that improve water quality and complement Watershed Restoration and Protection Strategies (WRAPS) and One Watershed One Plan (1W1P).
  - Request data to quantify the effectiveness of Multi-Purpose Drainage Management relative to

nutrient transport and hydrologic changes compared to traditional drainage systems, and an estimate of the hydrologic impact of drainage projects on downstream rivers and streams.
    - Support opportunities for training of drainage engineers, drainage authorities, and other relevant professionals on the benefits of MDM and resources available, to encourage line-item estimates for conservation practices, and to encourage cost-benefit analysis of water storage and its resulting impact on drainage system and maintenance costs.
    - Develop a drainage endorsement for the Minnesota Agricultural Water Quality Certification Program (MAWQCP) with the input of the Drainage Work Group and other stakeholders.
- Marcie Weinandt moves to adopt the drainage policy, seconded by Steve Christenson.

Discussion:

- Rich Biske: This is a recognition of the role of drainage in the state. There is a lot of good that comes with that, but there are also trade offs too. The drainage law has been around for a long time. We don't propose changing it, but we want to recognize new ways to manage drainage systems to improve water quality. Thank you to Tom Gile (BWSR) and Jeff Strock (UMN) who helped us better understand drainage.
- Holly Hatlewick: Can we include "and relevant partners and professionals" when mentioning those who would benefit from training. It would be consistent with another part of the document.
    - Marcie Weinandt and Steve Christenson accept this change as a friendly amendment.
    - Motion to adopt the drainage policy as amended, carries on a voice vote.

Review of technical change on Advanced Drinking Water Protection Policy Statement *(Webex 01:03:00)*

- This policy was adopted last meeting, but some technical changes were incorporated.
- On page seven, strike "fully" from the middle of the page, as well as removing "the drilling of new wells for low-income households." This matches recent legislative language.

Discussion:

- Dick Brainerd: Are these statements aligned with the Council's Strategic Plan? *Answer:* Yes. In many ways it is the outcome of the Strategic Plan.

Draft Minnesota Drinking Water Action Plan, by Tannie Eshenaur, Minnesota Department of Health (MDH) *(Webex 01:27:45)*

- Unlike the other Legacy funds, the Clean Water Funds (CWFs) take a systems approach to improving and protecting waters for generations to come. We know we cannot buy our way to water quality. A systems approach manages drinking water from source to tap. A 2016 Council policy recommendation requested a list of "drinking water protection" to be considered by the state to protect our drinking water. The UMN created a report with eleven recommendations, including this Drinking Water Action Plan. It was funded in 2021.
- The Minnesota Drinking Water Action Plan needs to be an actionable 10-year plan to ensure that everyone, everywhere in Minnesota has equitable access to safe and sufficient drinking water, including protection against existing and emerging threats. It incorporates diverse expertise and feedback.
- Private groundwater serves 1.1 million people, public surface water serves 1.4 million, and public groundwater serves 3.1 million. So about 75 percent drink groundwater, and 25 drink surface water. Cities and towns have the most regulation (public systems) and private wells have the least (private systems).
- A robust process developed this action plan. *The Future of Drinking Water* report developed by the UMN at the Water Resources Center and the Hubert Humphrey School of Public Affairs. There were recommendations, including an independent government assessment. This is a way of evaluating how drinking water is integrated into overall water resource management in the state of Minnesota. It provided a lot of resource material for this plan. It included asking many experts and technical staff about issues. We also interviewed through focus groups, finding out their concerns with water.
- They held a serious of community meetings, with the assistance of Clean River Partners and Freshwater. People supported developing a new state drinking water standard. Sixty-six percent trust their tap water, and twenty percent distrust their water quality. Culturally sensitive community engagement is crucial.
- Key issues include Contaminants of Emerging Concern (CECs), small community water systems facing disproportionate contaminant burdens, and the number of water operators and well contractors.
- Private wells do not have the same protections (local, state, and federal levels). There is neither a state drinking water act for private wells, nor revolving loan funds. The well code controls construction, but the

testing, treatment, and well maintenance is on the private well owner. Well users don't choose their geology or how the land is used around them. The MDH recommends that private well owners test their well for bacteria, nitrate, arsenic, manganese, and lead. State spending on these contaminants it is really out of balance with the public health burden of death and disease. There are two studies that connect health outcomes with environmental exposures. Arsenic is a known carcinogen. We can measure it in urine. Half of our new wells have arsenic. We know there are preventable cancer cases out there, and we need to act.

- The plan is to protect sources of drinking water from source to tap: establish resilient drinking water infrastructure (pump, people, data); ensure safe tap water (public water and private wells); as well as anticipate and manage emerging risks. Each area has specific goals and strategies. They are modeling their report after largely after the Clean Water Performance Report, and they want to have a report card.
- They just finished an open comment period. They would like to involve the Council, along with other groups.

Questions/Comments/Discussion:

- Warren Formo: When was the window when community systems began to have to treat for arsenic? *Answer:* When the maximum contaminate level (MCL) changed in 2001, they were given three years to comply.
- Warren Formo: Before 2001, there was no treatment required for arsenic. Was there an MCL for it? *Answer:* Yes, there was an MCL, but it was higher at 50 ppm.
- Warren Formo: Did those changes in the urine testing occurred after 2001? *Answer:* Yes. *Response from Warren Formo:* I am hopeful as people are testing and aware of their levels of arsenic. Treatment funding is available to help mitigate this issue and keep people safe.
- Jim Stark (public): We know the construction of wells in places can help reduce the arsenic risk, is there a way to inform well drillers? *Answer:* Yes, Dr. Mindy Erickson at USGS has done extensive work looking into this. Things fluctuate, and it is a better time to take samples after the well-establishes equilibrium. If you complete the well under a confining layer at a certain distance you may be able to reduce the arsenic. There may be some ways to reduce the risk, and we include this information in our continuing education.
- Marcie Weinandt: Has the well code created in 1974 been updated? *Answer:* In 2008 arsenic was added, and a certain cement also caused a change before that.
- Marcie Weinandt: You mentioned federal standards. Is Minnesota stricter in its standards? *Answer:* When we say standard, it is regulatory and enforceable. Those are MCLs with concentrations or treatment techniques that have to be used in public water systems. Minnesota can develop guidance values, which are advisory. We have that as a provision in the Groundwater Protection Act of 1989. Originally, for any contaminant detected in Minnesota's groundwater, the MDH can develop an advisory value when it goes through rulemaking, then it becomes a health risk limit. Before that, when they publish it, it is called a health-based value, but has not had the public comment period yet, so it is not a health risk limit (HRL) yet. The biggest difference between the federal value (MCL) and the Minnesota value (HRL) is the federal values are developed with the basic health value *and* a cost-benefit analysis (potential costs to remove it from certain points), whereas the Minnesota value is only health-based.
- John Barten: We need people to test their wells more. I've heard many reports that education does not change behavior, so what do we need to do to get people to change their behavior? It is a difficult hurdle to get over. I think this plan is necessary. A lot of people just assume their water is fine.
- Warren Formo: This is an important topic. I have a private well and have tested. I can see a path forward from the MDH, to test and create a database, so we all know what is being found in the water. It would be the ultimate knowledge of what is showing up in wells. Is there a number between zero and hundred that can be given to cities and towns, to have a better understanding of what might be in their water so they can test and treat for it too? I happen to be a person who doesn't test and just treats for things. I treat for a lot of things before the water gets to the tap. I am confident our drinking water is safe for my grandchildren to drink. However, that does not help the MDH know about what is in my well water. Within this conversation, leave private wells alone because there is an independence and distrust often from those well owners, but others who would rely on the information that is provided may want to have it and seek it out. Some of my children live in cities, and I have added treatment systems to their water because of what is coming next. How much do we demand of people, to make sure everyone has access to safe drinking water. There are multiple paths towards that (e.g., treatment, testing). As the MDH implements the plan, we can refine it.
- Marcie Weinandt: This is huge. The economic conditions of the well owners are varied. There are so many scenarios going on in my head, and it is just huge. It is complex.

- Rich Biske: There are a lot of recommendations in this document. There are new and helpful resources and incentives to do more and engage the public to act. Can there be a goal for different layers of government, that county boards can adopt a resolution, not to commit themselves to something, but rather to acknowledge the issues in their communities? The expectation to make it a priority when resources and funding are available. When do we take some of our state programs and policies and have the counties adopt them, in their own way with their own rules? *Answer:* I don't know. We considered who should we be building our system with (1W1P, Watersheds, counties). My first boss said, the way we solve problems is by nibbling around the edges. We need to have a coherent plan, that is systemic in nature, so it endures and persists. We want the protection that will last into the future, and local is important.

Understanding BWSR's WBIF Work Plans, Grant Review Panels, eLink System, and BWSR Board Approval Processes *(Webex 02:51:30)*

- This presentation is to go over:
  - The history of CWF implementation, and how it is important to how WBIF operates today.
  - The WBIF process of how projects are planned and vetted, with significant BWSR oversight.
  - Hearing from the CWC about communicating program process, oversight, and outcomes most effectively.
- The Clean Water Legacy Act in 2006 drives the work. The act was focused on Clean Water Act (CWA) requirements like assessments and total maximum daily loads (TMDL), accelerating implementation, protection of groundwater. The Minnesota Legislature appropriated BWSR funding to BWSR, which became the competitive grant program. They needed to be consistent with TMDL implementation plans or local water management plans.
- BWSR started with the local plans, and work plan, and then a competitive grant proposal with an inter-agency review that was scored and ranked. They looked at prioritization, targeting, measurable outcomes, cost effectiveness, feasibility, and project readiness. It took a lot of time.
- In 2009, there was a proposal to reorganize water management by basin, but it failed because of concerns over local autonomy. That led to creation of the local government water roundtable (Soil and Water Conservation Districts, Counties, and Watershed Districts). They developed a policy paper in 2013 and a funding paper in 2016 for alternative proposals.
  - The policy paper held a key concept: One Watershed, One Plan (1W1P).
  - The 2016 funding paper determined:
    - A funding mechanism should be predictable, efficient, and effective unlike the competitive process.
    - Comprehensive watershed management plans with local partnerships should drive action.
    - More predictable funding for implementation will make it more likely to achieve progress.
- The CWFs and One Watershed One Plan allows them to prioritize, target, and measure based on science.
- Watershed policy committees, advisory committees, and a steering team drive One Watershed One Plan. There are a lot of controls build into the system to make sure everyone is following the plan.
- This is a vision of doing something big, creating measurable results, and collaborative and coordinated work, accelerating our goals, using multiple funding sources. We can dive as deep as the Council wants.

Questions/Comments:

- Dick Brainerd: Eight years later, have there been changes? *Answer:* We are following the 2016 funding paper. A few different things have been tried in different areas but we have stuck close to this setup.
- Brad Gausman: Back in 2016, were there other sources of funding being considered to fund this work being described by the 1W1P? *Answer:* For most of the country, Farm Bill programs do a lot of conservation activity, and you can tap into other sources. This year was the first time that the CWFs were greater than the federal funding. Hopefully that federal funding continues. There are several federal programs that help with agricultural systems. The CWFs are supportive of other funds, and there is a lot of leveraging.
- Brad Gausman: It sounds like you are creating a little Clean Water Council within each plan. Regarding program and funding growth. When the program was first pitched, was there expectation of exponential growth? It is a large percentage of the funds. *Answer:* We have increased every biennium as the number of plans approved increases. By the end of this biennium, we will have 54 plans approved, which explains the large jump in funding lately. We did share the expectation of an upward trajectory. Additionally, the local government roundtable policy paper did set a recommendation that 60 percent would go to the WBIF. Their estimated number was $133 million dollars, and we are asking $90 million, which is the minimum to have for

the work in progress now. They did not come to the Council with that, and there was some controversy over it. It is for the Council to work through. However, that trajectory was presented. Part of that trajectory was to show that as WBIF goes up, the competitive projects and practices funding would go down. However, competitive grants are still popular, and people are willing to put the work in the process even if they do not receive funding, especially if it is for a project that goes beyond the WBIF projects.

- Rich Biske: If we continue to increase WBIF, do we do a disservice to critical geographies and issues in the state. It seems a little inflexible. It is important to continue this trend because there are good programs addressing areas. However, we need to be aware of these tradeoffs. It impacts the outcomes as well, if we are looking at pounds of phosphorus removed, are we being concise in our measurements across all this work? I am concerned at the pace as well because we won't reach the finish line. Do some watersheds make it further, while others are behind? Are we striving for further work or for equality, and I don't think we can do both. *Response:* We need the local trust. We need local communities to rally around these issues and say that it is important, and they need to include resources too. The most impactful way to be successful is to have a local person banging on a drum for these items.
- Holly Hatlewick: From an implementor's perspective, we are going forward with purpose, and these bigger state goals are identified in the plan. We can leverage other funds. We have been successful at getting federal funds because we were able to point to our watershed plan and identify the work that has already been vetted through the science and through the process. It gave us more authority in those applications.

No Public Comments *(Webex 04:17:00)*

Adjournment *(Webex 04:17:42)*

Summary of ICT Discussion on Tribal Consultation

26 Nov 2024

Attending: Paul Gardner (CWC), Tannie Eshenaur (MDH, Jason Moeckel (DNR), Margaret Wagner (MDA), Sam Paske (Met Council), Andrea Fish (BWSR), Judy Sventek (Met Council), Ole Olmanson (Shakopee Mdewakanton Sioux Community and Clean Water Council), Rajinder Mann (MDA), Katie Jensen (MPCA)

Tribal Liaisons: Ravyn Gibbs (MDH), Allison Waukau (Met Council), Shannon Kesner (MPCA), Melissa King (BWSR), John Hunter

Paul Gardner described how the Clean Water Council has made some progress in engaging tribal governments, including staff attending state-tribal-relations training, making tribal governments eligible for BWSR's Water Legacy Partners grant program, and cataloging activities funded by the Clean Water Fund in which agencies worked with tribal governments.

Gardner asked for ideas on how the Council could have ongoing engagement with tribal governments to help information the Council's biennial recommendations for the Clean Water Fund.

Tribal liaisons offered this helpful input:

- If the Council has the budget, it can send Council members to state-tribal relations training.
- Staff-to-staff conversations are a good first step for building up to meeting with tribal leaders. It will avoid confusion and tension later. They want to know YOU. The Minnesota Tribal Environmental Committee is a good start. (Link below.) Cold calls are not effective.
- Talk to the liaisons to understand the relationships in each tribal government.
- One tribal government speaks for itself, not the ten others. You need to talk to all of them.
- Tailor your message to the specific tribal government and have an ask, but don't expect useful dialogue right away in a group setting. One-on-one conversations are critical.
- The Minnesota Indian Affairs Council (MIAC) is open to having people make informational presentations on day two of their quarterly board meetings. The next one is in January 9-10 at Prairie Island Indian Community. [Paul Gardner has reached out to the MIAC executive director.]
- You may need to use a variety of communications tools, including snail mail (if reaching out to the tribal government administration).
- Be willing to receive input even if it isn't related to our specific objective. Listen and process it.
- Show what your long-term relationship and plan with them looks like.
- Tribal staff prioritizes federal government connections first, then the state. Keep it in mind.
- The MPCA's triennial review of water quality standards is an opportunity for incorporating treaty rights.
- Agency budget change item sheets include a section indicating if tribal consultation will be needed. You might review those for the CWF programs.

Reference Links:

- Minnesota State Agency Tribal Liaisons - Tribal-State Relations Training - MnDOT
- Sec. 10.65 MN Statutes Government-to-Government Relationship with Tribal Governments
- Minnesota Tribal Environmental Committee
- TribalContactsList04132023.xlsx - Google Sheets

Clean Water Fund

Minnesota Management and Budget

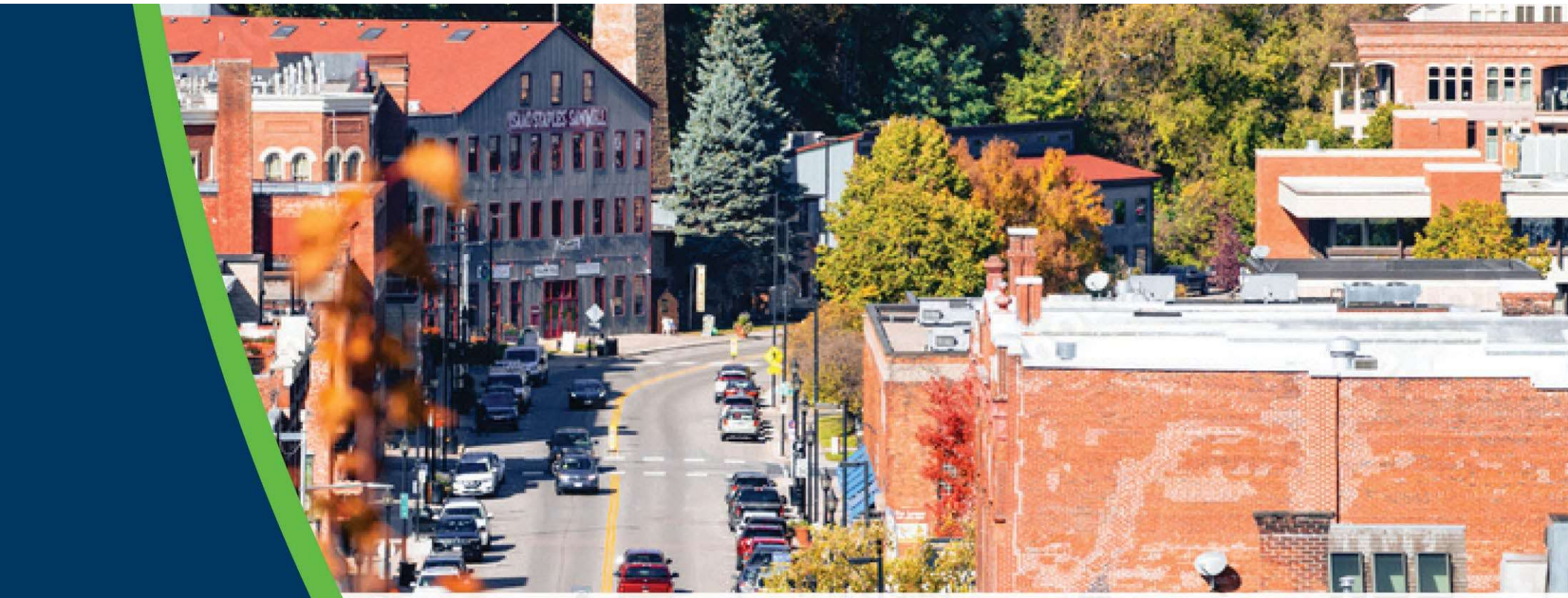
12.5.24

($ thousands)	Estimate of		
	Nov Forecast 2024		
	FY26	**FY27**	
Unobligated Carry Forward from Prior Year	7,435	7,567	
Sales Tax Receipt Forecast	151,348	156,483	
Investment Income & Other Revenue	2,020	1,290	
Transfers from other Funds	-	-	
Estimate of Total Resources	*160,803*	*165,340*	
Budgetary Balance	160,803	165,340	
Required 5% Reserve	7,567	7,824	**Total for Biennium**
Estimated Amount Available to Appropriate	**153,236**	**157,516**	**310,752**

The table above shows the estimated amount available to appropriate in the 2026-2027 biennium from the Clean Water Fund based on the November 2024 forecast. Two considerations are noted for this estimate:

1) 5% Reserve Requirement: Per M.S. 114D.50, Subd. 7, this estimate assumes 5% of the projected future sales-use tax revenue for each year are held in reserve and not available for appropriation.

2) February Forecast Revision: This estimated amount available to appropriate will be revised with the February 2025 forecast.



BUDGET AND ECONOMIC FORECAST

MINNESOTA

NOVEMBER 2024

Produced by Minnesota Management and Budget

Small Balance Projected in FY 2026-27, Structural Imbalance Grows

- FY 2026-27 projected balance is $616 million, $1.1 billion less than prior estimates
- Structural imbalance widens as spending growth exceeds long term revenue forecast, driving projected deficit in FY 2028-29 biennium

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- Individual income and sales tax revenues are lower than previously estimated
- Long-term care services and special education drive increased spending

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- Potential policy shifts at federal level create forecast uncertainty
- Statutory allocation to budget reserve reinforces state's commitment to strong financial planning

U.S. Economic Forecast Risks


Uncertainty around trade and immigration policies


U.S. fiscal policy uncertainties


Inflation


Monetary policy


Geopolitical conflict


31 months until the end of FY 2026-27

Revenue Forecast

($ in millions)	FY 2026-27 End of Session	FY 2026-27 Nov. Forecast	Forecast Change	% Change
Individual Income Tax	$33,651	$32,821	$(830)	(2.5)
General Sales Tax	16,381	15,840	(541)	(3.3)
Corporate Franchise Tax	6,287	6,376	90	1.4
All Other Revenue	8,526	8,816	290	3.4
Total Revenues	**$64,845**	**$63,853**	**$(992)**	**(1.5)**

Clean Water Fund Appropriations as of 12/11/2024

leg order	Agency		Program Title	Description	Final recs 12/6/2024	Change from ICT recs	Change vs FY24-25	ICT FY26-27 recs
1	MDA	MAC	Monitoring for Pesticides in Surface Water and Groundwater	Analyzes an additional 650 pesticide samples annually at MDA lab for risk assessment, planning, and BMPs.	740	-	40	**740**
2	MDA	GDWI	Nitrate in Groundwater	Supports implementation of the new Groundwater Protection Rule and Nitrate Fertilizer Management Plan to reduce nitrate from fertilizer to groundwater. Working with 38 local government units on nitrate monitoring and reduction activities.	6,200	-	(800)	**6,200**
3	MDA	NPSI	AgBMP Loan Program	Loan program to provide low or no interest financing to farmers, agricultural businesses, rural landowners and others for the implementation of best management practices that prevent, reduce or eliminate environmental pollution.	4,000	-	(9,000)	**4,000**
4	MDA	NPSI	Technical Assistance	Supports 25 edge-of-field water quality monitoring sites, 100 farm demonstration plots, and 30 field days and other events annually.	3,200	-	200	**3,200**
5	MDA	RET	MN Water Research Digital Library [aka Research Inventory Database]	The MN Water Research Digital Library is a one stop to find water related research and reports in Minnesota.	100	-	20	**100**
6	MDA	NPSI	MN Agricultural Water Quality Certification Program	Provides technical and financial assistance for farmers to adopt water quality BMPs with verified results. Matched with federal Regional Conservation Partnership Program (RCPP) grant.	7,000	-	-	**7,000**
7	MDA	GDWI	Irrigation Water Quality Protection	Funds irrigation UMN extension staff to educate on agricultural irrigation and nitrate BMPs.	310	-	10	**310**
8	MDA	RET	Forever Green Agricultural Initiative (U of MN)	Supports competitive R&D grants for crops providing continuous living cover, and implementation of those crops.	6,000	2,000	-	**4,000**
9	MDA	MAC	Pesticide Testing in Private Wells	Provides free pesticide testing for vulnerable wells in agricultural regions around the state, and has completed free pesticide testing for 6,100 vulnerable wells in 344 priority townships.	1,000	-	-	**1,000**
10	MDA	NPSI	Conservation Equipment Assistance	Will assist SWCDs and farmers with new or retrofitted equipment for implementing soil health practices, such as conservation tillage and cover crops.	3,500	-	-	**3,500**
11	MDA	NPSI	Expand MN Ag Weather Station Network	Will expand network to optimize timing of irrigation, fertilizer, pesticide, and manure applications.	2,500	-	(500)	**2,500**

12	MDA		Agricultural Research/Evaluation	Will update recommendations for manure crediting and manure BMPs.	-	-	(1,500)	-
13	MPCA	MAC	River and Lake Monitoring and Assessment	Completes intensive monitoring in about eight watersheds per year, and annual pollutant monitoring at 197 sites annually. New recommendations will support regular PFAS monitoring.	18,900	-	474	**18,900**
14	MPCA	WRAPS	Watershed Restoration & Protection Strategies (includes TMDL development)	Develops data-driven strategies to meet water quality goals in each of 80 watersheds at about eight to ten watersheds annually. Required by law to be complete in 2023. Also completes required TMDLs for impaired waters.	14,500	-	1,800	**14,500**
15	MPCA	MAC	Groundwater Monitoring and Assessment	Performs water quality sampling & data analysis from network of 270 ambient wells.	2,000	-	-	**2,000**
16	MPCA		St. Louis River AOC	Manages cleanup of the St. Louis River/Duluth harbor. Attracts state and federal matching funds.	-	-	(1,500)	-
17	MPCA	PSI	NPDES wastewater/stormwater point-source implementation (combined from 2 previous programs)	Provides technical assistance to cities to help them comply with state stormwater permit. Integrates stormwater and wastewater data with WRAPS and includes TMDLs in permits. Supports pollutant trades. Maintains Minnesota Stormwater Manual.	3,200	-	200	**3,200**
18	MPCA	GDWI	Enhanced County inspections/SSTS corrective actions	Provides county grants for more SSTS inspections and income based assistance to maintain 80 percent compliance.	7,081	-	(1,969)	**7,081**
19	MPCA	PSI	Chloride Reduction	Provides technical assistance and grants to public entities to meet chloride TMDLs, mostly from road de-icers and water softening.	1,300	-	(1,000)	**1,300**
20	MPCA	ADM	Clean Water Council	Funds two FTEs, communications, planning, and Council member expenses.	922	-	247	**922**
21	MPCA	GDWI	National Park Water Quality Protection Program	Replaces failing septic systems polluting Voyageurs National Park. Matched by local, state, and federal sources.	1,500	1,500	(500)	-
22	MPCA	MAC	Nitrate Sensors		-	-	(2,000)	-
23	MPCA		River Watch for Friends of the MN Valley		-	-	(50)	-
24	DNR	MAC	Stream Flow Monitoring Program	Continuously monitors 172 sites for volume, chemistry, and sediment.	5,650	-	550	**5,650**
25	DNR	MAC	Lake Index of Biological Integrity	Surveys fish and aquatic plants in 495 lakes for stressors. Results serve as proxy for “fishable” waters.	3,050	-	150	**3,050**
26	DNR	MAC	Fish Contamination Assessment	Tests fish for mercury, PCBs, and PFAS for 1385 lakes and 114 rivers	1,100	-	100	**1,100**

27	DNR	WRAPS	Watershed Restoration and Protection Strategies-DNR Portion	Adds geomorphology, hydrology, and connectivity data to WRAPS process, and supports Watershed Health Assessment Framework (WHAF) tool	5,000	-	700	**5,000**
28	DNR	MAC	Aquifer Monitoring for Water Supply Planning	Monitors 1,125 wells statewide and installs 50 new wells annually. Provides planning and technical assistance to water suppliers and LGUs.	4,700	-	700	**4,700**
29	DNR	NPSI	Non-point Source Restoration and Implementation	Provides technical assistance for 85 projects annually that are prioritized in comprehensive watershed management plan.	4,500	-	1,300	**4,500**
30	DNR	RET	Tool Development and Evaluation [Formerly Applied Research and Tools]	Evaluates water flow ("digital dams") and forestry BMPs throughout the state, and develops fine-scale watershed models using LiDAR.	1,400	-	100	**1,400**
31	DNR	MAC	Buffer Map Maintenance	Maintains mapping capability to determine compliance with buffer law.	-	-	(50)	**-**
32	DNR	RET	County Geologic Atlas Part B	Develops Part B county level groundwater atlases.	200	-	-	**200**
33	DNR	NPSI	Freshwater Mussel Restoration	Will increase native mussel production at Lake City facility and field test restoration in three major watersheds for water quality.	700	-	100	**700**
34	DNR	NPSI	Water Storage	Will support water storage on drained wetlands on selected DNR lands in southern and western Minnesota.	-	-	(1,000)	**-**
35	DNR	NPSI	Culvert Replacement Cost Share	Will provide financial and technical assistance for 20 local government projects to replace culverts that support floodplain connectivity, biological connectivity, and channel stability.	3,000	-	1,000	**3,000**
36	BWSR	NPSI	Grants to Watersheds with Approved Comprehensive Watershed Plans (Watershed-based Implementation Funding)	Makes non-competitive grants to fulfill projects in approved comprehensive watershed management plans (One Watershed One Plan).	90,000	-	11,000	**90,000**
37	BWSR	NPSI	Surface and Drinking Water Protection/Restoration Grants: (Projects and Practices)	Makes competitive grants for high priority conservation BMPs in local water plans. Up to twenty percent must support drinking water.	6,000	-	(11,000)	**6,000**
38	BWSR	NPSI	Accelerated Implementation	Builds technical skills through Technical Service Areas and technical trainings. This grant program builds the capacity of local governments to accelerate on-the-ground projects that improve or protect water quality and perform above and beyond existing standards.	8,700	-	(2,300)	**8,700**
39	BWSR	NPSI	Measures, Results and Accountability	Supports grants management, reporting, and oversight	2,500	-	-	**2,500**
40	BWSR	NPSI	Buffer Law Implementation	Supports oversight and grants to SWCDs for implementation of the buffer law. Does not include enforcement.	4,000	-	-	**4,000**

41	BWSR	NPSI	Working Lands Floodplain Easements [formerly Riparian Buffer-Permanent Conservation Easements]	Establishes and restores easements in floodplains and riparian areas.	2,000	-	(6,434)	**2,000**
42	BWSR	GDWI	Targeted Wellhead/Drinking Water Source Protection	Makes easements and grants to LGUs in priority wellhead protection areas.	5,000	-	(1,000)	**5,000**
43	BWSR	RET	Technical Evaluation [restoration evaluation]	Conducts up to 10 technical evaluations of CWF projects annually. Required by law.	200	-	-	**200**
44	BWSR	1W1P	Watershed Management Transition (One Watershed, One Plan)	Completes about seven comprehensive watershed management plans annually on average. All plans covering all 80 major watersheds will be started by 2025.	1,000	-	(2,500)	**1,000**
45	BWSR	NPSI	Conservation Drainage Management and Assistance	Provides grants and technical assistance to SWCDs/drainage authorities for water quality BMPs.	2,000	-	-	**2,000**
46	BWSR	NPSI	Critical Shoreland Protection-Permanent Conservation Easements	Protects threatened shoreline with easements to protect good water quality.	1,000	-	(6,000)	**1,000**
47	BWSR	RET	Tillage, Cover Crop and Erosion Evaluation	Estimates soil erosion and tracks use of tillage BMPs and cover crops.	850	-	-	**850**
48	BWSR	NPSI	Watershed Partners Legacy (WPL) Grants	Makes small grants to tribal governments and nonprofit organizations.	1,000	-	(2,000)	**1,000**
49	BWSR	NPSI	Wetland Restoration Easements	Creates permanent easements for de-nitrification and rate and volume control.	5,000	-	(5,000)	**5,000**
50	BWSR	NPSI	Enhancing Soil Health and Landowner Adoption of Cover Crops for Drinking Water & Groundwater Protection	Supports Minnesota Office of Soil Health (MOSH). Makes grants to SWCDs for cover crop and conservation tillage demonstration projects. Supports Governor's climate initiative.	11,852	(148)	(225)	**12,000**
51	BWSR	NPSI	Great Lakes Restoration LAMP	Supports SWCD capacity in Lake Superior Basin in order to seek out and implement matching Great Lakes Restoration Initiative (GLRI) funds.	1,000	-	-	**1,000**
52	BWSR	NPSI	MN & IA Conservation Corps	Supports Conservation Corps' work on water quality projects supported by the Clean Water Fund.	1,500	-	1,500	**1,500**
53	MDH	MAC	Contaminants of Emerging Concern	Develops health-based drinking water guidance for about five contaminants annually, with PFAS efforts to increase with this new recommendation.	11,850	-	1,366	**11,850**
54	MDH	MAC	Private Well Initiative	Will offer free private well testing for five contaminants to 10 percent of Minnesota's private well owners annually for ten years. Adds to private well inventory and supports education.	6,000	-	3,000	**6,000**

55	MDH	WRAPS	Source Water Protection	Assists public water systems in the management of over 500 source water protection plans statewide. Completes new or updated planning and data driven strategies for 60 systems during the biennium. Provides grants for implementation activities. Collaborates with other local planning efforts and develops and coordinates water quality surveillance activities.	7,790	-	290	**7,790**
56	MDH	WRAPS	Groundwater Restoration and Protection Strategies	Completes GRAPS for six to eight major watersheds annually in alignment with comprehensive watershed management plans (One Watershed One Plan). Also provides training and makes groundwater data public.	3,500	-	2,000	**3,500**
57	MDH	GDWI	Future of Drinking Water (formerly Drinking Water Protection)	Will develop a statewide Drinking Water Plan that will include public health policies and will address threats to public and private drinking water supplies.	500	-	-	**500**
58	MDH	RET	Recreational Water Portal	Will develop a statewide portal for beach monitoring results, closures, and public health notifications.	600	-	-	**600**
59	MDH		Nitrate response in SE Minnesota**		-	-	(2,790)	**-**
60	MC	GDWI	Metropolitan Area Water Sustainability Support Program	Provides technical support to communities and businesses to use groundwater more efficiently.	2,750	-	500	**2,750**
61	MC	NPSI	Water Demand Reduction- Efficiency - Grant Program	Makes grants to metro cities to replace inefficient residential fixtures/sprinklers to reduce groundwater demand.	1,500	-	-	**1,500**
62	UMN	RET	County Geologic Atlas Part A	Develops Part A county-level geologic atlases.	800	-	(200)	**800**
63	UMN	RET	Stormwater Research and Technology Transfer Program	Makes competitive grants to research and evaluate stormwater BMPs.	2,000	400	(1,000)	**1,600**
64	LCC	ADM	Legislative Coordinating Commission Website	Supports upkeep of LCC site with CWF project information. Required by law.	7	-	1	**7**
65	PFA	PSI	Point Source Implementation Grant (PSIG) Program	Upgrades municipal water treatment facilities to comply with TMDLs	16,500	-	-	**16,500**
66	PFA	PSI	Small Community Wastewater Treatment Program	Makes grants & loans to replace failing community SSTS.	100	-	(100)	**100**
					$ 310,752			**$ 307,000**
							total	

Minnesota Underground Utilities Mapping Project [Already approved by Council 28 July 2021]

Policy Statement

To create an accurate inventory of Minnesota's underground utility infrastructure, the Clean Water Council (CWC) recommends that the State of Minnesota develop an accurate map of all underground utilities installed in the state and require Minnesota's public and private sectors to support sharing of necessary data in a secure and confidential manner.

The underground utility infrastructure mapping project supports the Clean Water Council's efforts to reduce the risk to drinkable, fishable, and swimmable water.

Problem

Damage to Minnesota's underground utilities can disrupt critical water infrastructure (drinking water and wastewater) and contaminate groundwater and surface water. In addition, without accurate mapping, public safety is a concern, especially when work is being done near petroleum and hazardous materials pipelines.

Damage most often results from data that is incomplete, inaccurate, or only exists on paper. This limits the ability of public and private entities from sharing data and ensuring its accuracy over time.

Examples of utilities that require accurate mapping include, but are not limited to:

- Drinking water supply pipes
- Wastewater pipes
- Stormwater pipes and stormwater storage
- Petroleum pipelines
- Hazardous materials pipelines
- Telecom infrastructure, and
- Abandoned infrastructure that could transport aquatic invasive species.

Much of this data is held by the private sector, and therefore is not in the public sector's possession. It is imperative that the sharing of data can be accomplished in a secure and confidential manner.

Solution

Improving the accuracy of Minnesota's underground utility maps will reduce these risks. Gopher State One Call (GSOC) and the Minnesota Geospatial Advisory Council Emergency Preparedness Committee (EPC) have formed the Underground Utility Mapping Project Team (UUMPT) to address this issue.

The mapping project works to improve locate efficiencies and accuracy, reduce damage to the state's underground infrastructure, and improve operational and construction safety by leveraging current and emerging GIS technologies through cross-community collaboration that develops best practices and promotes technology solutions.

With security and confidentiality being critical, the efforts will include protection of data from competitive intrusion and security threats using appropriate procedures and advancements in geospatial technology that facilitate sharing of data via secure and limited access.

Pharmaceutical Policy Statement [Approved by Clean Water Council on 02/28/2022]

[This statement revised a previous statement from the FY18-19 recommendations.]

Policy Statement

The Clean Water Council recommends that the State establish the following to reduce the discharge of pharmaceuticals into the waters of Minnesota:

1. Fund research on the pathways of pharmaceuticals into surface water and ground water, identify priority pharmaceuticals that pose the greatest risk to human health and aquatic life, identify and support practicable solutions to reduce their entry into Minnesota waters, and recoup reasonable costs through an industry-funded safe medication return program.
2. Adopt a "Safe Medication Return Program."
    - This legislation should provide flexibility by:
        - Utilizing the current collection infrastructure;
        - Requiring manufacturers to support public education and outreach activities; and to cover all administrative and support costs including, but not limited to: collection, compensation to authorized collectors, transportation, secure receptacles, and environmentally sound disposal of covered pharmaceuticals;
        - Allowing residents to take unused medications to drop-off locations or use a mailing envelope, both for free
        - Providing drop-off locations that are "equitable and reasonably convenient"
3. Require the words or symbols for "do not flush" be printed on all prescription pharmaceutical labels and remove any existing instructions to flush unused portions.

Problem

Pharmaceuticals are used to treat, cure, diagnose, and prevent disease and ailments in humans, agricultural animals, and companion animals. The use of pharmaceuticals is expected to increase in response to increasing demand. These chemicals are designed to be biologically active and potent at low doses. Pharmaceuticals enter the environment through many pathways including:

- Improper disposal of unused medications (both in home and at care facilities)
- Runoff from manure on agricultural fields or feedlots
- Effluent from health care facilities, medication manufacturing and other industrial sources
- Excretion from normal use in humans (e.g., not all of the drug is fully metabolized in the body)

Pharmaceuticals are commonly detected in Minnesota surface water, groundwater and sediment. The concentrations detected are low relative to other contaminants, but they can have negative impacts on the environment, especially aquatic species. It is extremely difficult and costly to remove these chemicals from wastewater and drinking water. Preventing entry to the environment, such as through improving prescription practices and minimizing input from waste streams is the best way to avoid potential impacts of pharmaceuticals.

In addition to the environmental impact of waste pharmaceuticals being discharged into the waters of Minnesota, there is also a public safety benefit to environmentally sound disposal. Prescription drugs

left unused by the intended recipient, which are not disposed of properly, can be misused by others and have serious or fatal consequences. Seven out of ten people who start abusing prescription drugs get them from the medicine cabinets of friends and family. Among children, the most common cause of accidental poisoning is from ingesting drugs. In addition, periodic cleaning of the medicine cabinet reduces the likelihood that adults, especially the elderly, will take the wrong medication, wrong dose or use expired medications.

Current Efforts by State Agencies with Clean Water Fund (CWF)

With funding from CWF, the Minnesota Department of Health (MDH) and the Minnesota Pollution Control Agency (MPCA) conduct research, public education, monitoring and collecting waste pharmaceuticals throughout the State, and environmental surveillance. Both agencies work closely with other State agencies, local entities such as local law enforcement, county & city public health departments, and local pharmacies to keep unwanted pharmaceuticals from reaching our waters.

Minnesota Department of Health:

Pharmaceutical Rapid Assessments: Using a novel method, MDH has established conservative screening values (above which the risk of negative human health affects increases) for 119 pharmaceuticals commonly prescribed in the U.S., and monitored for in the environment.

Outreach & education grants: Grants go to local governments, non-profits, watersheds districts, and academic institutions to raise awareness of pharmaceuticals and other contaminants of emerging concern (CEC), expand outreach on pharmaceutical take-back opportunities, and reduce the presence of CECs in the environment through behavior change.

Educational resources: The Department creates resources for local entities that facilitate outreach to communities and provide a consistent message throughout the State on the health and environmental risks of pharmaceuticals and other CECs.

One Health Antibiotic Collaborative: The MDH leads a team of experts from Minnesota Department of Agriculture, MPCA, Minnesota Department of Natural Resources, Board of Animal Health, Board of Veterinary Medicine, University of Minnesota, pharmacy and dentistry groups, physicians, agricultural representatives, and other experts to ensure that Minnesotans use antibiotics in a manner to reduce antibiotic resistance and protect the environment. http://www.health.state.mn.us/onehealthabx/

Unregulated Contaminants Monitoring Project (UCMP): In the Unregulated Contaminants Monitoring Project, MDH sampled approximately 70 community systems across Minnesota for a wide spectrum of unregulated contaminants, including pharmaceuticals. MDH tested for over 150 pharmaceuticals at participating systems supplied by surface water and systems potentially impacted by wastewater.

Drinking Water Ambient Monitoring: MDH is establishing a Drinking Water Ambient Monitoring program to operationalize surveillance of unregulated contaminants in drinking water sources, such as pharmaceuticals. Ambient monitoring data drives the identification, management, and elimination of high-risk sources of contamination to drinking water sources. This program will help MDH and public

water systems anticipate potential threats from unregulated contaminants and will inform future source water protection efforts.

Minnesota Pollution Control Agency

Monitoring of pharmaceuticals and other contaminants of emerging concern (CECs) in surface and groundwater: The MPCA monitors pharmaceuticals and other CECs in surface water and groundwater to determine their presence and prevalence in the environment. Currently, the MPCA monitors about 140 chemicals comprised of pharmaceuticals, hormones, anti-corrosives, and other industrial or commercial chemicals in surface and groundwater. Among those, most frequently detected pharmaceuticals in surface water are: antidepressants (amitriptyline, fluoxetine, and sertraline), and iopamidol (an x-ray contrast agent). The January 2021 study, "Pharmaceuticals and Chemicals of Concern in Minnesota Lakes, shares the results of sampling in 50 randomly selected lakes. The study shows that contaminants of emerging concern are widespread in the state.

Investigation of sources of pharmaceuticals and other CECs to the environment and evaluate their potential effects on aquatic life: MPCA conducts focused investigations to determine sources of pharmaceuticals to the environment and understand potential actions to reduce them: pollution prevention, best management practices, rules. Often MPCA collaborates with university and federal researchers in these studies to use genomics and other new techniques to assess potential effects on fish and other aquatic life. MPCA has also developed a semi-automated approach for summarizing known information about the behavior and potential impacts of specific pharmaceuticals and CECs on aquatic life, resulting in an Aquatic Toxicity Profile (ATP). The ATPs provide a basis for comparing one chemical versus another.

Outreach & education materials: The agency provides support to local governments, pharmacies, law enforcement and other agencies to raise awareness on the impacts of pharmaceuticals in the home and in the environment, and to support proper disposal of unneeded pharmaceuticals.

Registration and tracking of waste pharmaceutical collection locations in the state: The MPCA works with local law enforcement, pharmacies, Native American Tribes and other state and federal agencies to encourage the installment of secure bins to dispose of unwanted pharmaceuticals. The MPCA oversees over 350 collection sites and collects data from them annually. Since 2010, these programs have voluntarily collected over 550,000 pounds of waste pharmaceuticals. The MPCA is working with the Department of Human Services on a federal grant to place approximately 25 collection boxes in underserved areas of the state in 2018.

PFAS

Policy Statement

The Clean Water Council recommends that the Clean Water Fund be a partial source of funding to implement the Minnesota's comprehensive PFAS Blueprint. Of the ten key issue areas prioritized in the Blueprint, there are three in which the Clean Water Fund would both fulfill both the Clean Water Legacy Act and the Blueprint.

- **Quantifying PFAS risk to human health**
- **Limiting PFAS exposure from drinking water**
- **Reducing PFAS exposure from fish and game consumption**

Problem

The PFAS Blueprint sizes up the problem this way.

> Per- and polyfluoroalkyl substances, commonly known as PFAS, are an enormous family of chemicals and now pervasive in the environment. Called "forever chemicals", they do n3333ot breakdown and can bioaccumulate in both humans and other living organisms, with some known to be toxic. Minnesota requires a strategic, coordinated approach to protecting families and communities.

A substantial financial settlement with 3M provides $850 million in funding for resource damage from PFAS in the state[1], including $700 million in providing safe drinking water in the east Twin Cities metro area. However, the Blueprint identifies significant knowledge gaps about additional problems:

> A key challenge in understanding and regulating PFAS is identifying their uses, presence in the environment, and impacts on health and ecosystems. Available sampling techniques and established analytical methods characterize less than one percent of all PFAS in the environment. There are gaps in our understanding of the effects of PFAS on human and environmental health including a lack of toxicity studies available. Without toxicity studies, it is not possible to complete health risk assessments used to determine safe levels of human exposure. The breadth and diversity of PFAS pollution, coupled with a lack of research on health impacts, complicates the development of regulatory and non-regulatory approaches to managing PFAS.

Other State Efforts

In addition to the 3M settlement, the State of Minnesota has worked on PFAS issues on several fronts.

- Minnesota Department of Health (MDH): Using toxicity assessments, the department has developed health-based guidance values for drinking water and fish consumption for several PFAS compounds.
- Minnesota Pollution Control Agency (MPCA): The agency tested for PFAS in lakes and streams as early as 2004.

Current Uses of the Clean Water Fund

State agencies currently use the Clean Water Fund to investigate PFAS.

- **Contaminants of Emerging Concern (CEC) Program**: The Minnesota Department of Health administers this program, which provides health-based values for contaminants that are not currently federally regulated. Of the more than 100 contaminants evaluated, five are PFAS

[1] https://3msettlement.state.mn.us/

compounds. MDH reports that this process (including possible re-evaluation as new data emerge) can take up to two years. Each year the CEC Initiative seeks nominations of contaminants to evaluate. In FY2021, 14 of 24 nominations were for PFAS compounds. The initiative has also developed the Alternative Risk Assessment Methodology (ARAM) Project to use alternative risk assessment methods that appears effective with shorter-chain PFAS compounds when there is scant toxicology information available. (Blueprint, p. 53)

- **Statewide PFAS Monitoring Project:** MDH is testing every community water system in the state for PFAS. The goal of this project is to evaluate whether Minnesotans are exposed to PFAS at levels above health-based guidance values in drinking water. MDH is posting the status and results of the testing on an Interactive Dashboard for PFAS Testing in Drinking Water, which shows whether testing results are below or above available guidance values. This project received partial funding from the CWF and an EPA Multi-Purpose Grant, and sampling is taking place between 2021-2023. The MPCA and MDH coordinated efforts in earlier phases of the project when MDH prioritized sampling at systems with nearby PFAS sources or detections.
- **Fish Contamination Assessment**: The DNR has sampled for PFAS on a sporadic basis in fish tissue. More routine assessment that will allow for statewide fish consumption guidelines will not be possible without additional funding. It appears that PFAS contamination in fish is pervasive. According to the Blueprint, "84% of the Metro lakes and 22% of the Non-metro lakes sampled to date had fish with detectable levels of PFOS. Of the lakes with a known PFAS source nearby, all lakes had fish with detectable levels of PFOS, in both Metro and Nonmetro waters."
- **Ambient Groundwater Well Network**[2]: This program is supported by the Groundwater Assessment program at MPCA and sampled for PFAS in 2013 and 2019. It provides "an early warning system for PFAS migration into drinking water aquifers." The MPCA monitors for contaminants of emerging concern at about 40 wells annually. The MPCA and MDH coordinated efforts for the Statewide PFAS Monitoring Project, particularly in earlier phases of the project when MDH prioritized sampling at systems with nearby PFAS sources or detections. According to the Blueprint:

  > Funding from the CWF allowed the MPCA to install shallow monitoring wells in key areas where existing wells were not available, such as residential areas that use subsurface sewage treatment systems for wastewater disposal, and commercial or industrial areas. This funding also allowed the MPCA to expand the list of chemicals it routinely analyzed in water samples to include CECs. MPCA has also been able to do some specific, non-routine, sampling for PFAS. In 2013, with limited targeted follow-up in 2017, MPCA was able to include 13 PFAS analytes in the analysis of groundwater samples. The results of PFAS monitoring are available in a report on MPCA's website. This report shows that PFAS were detected in most groundwater in the state….

Solution

Additional funding in FY24-25 from the Clean Water Fund would increase the capacity to monitor and assess PFAS in Minnesota.

[2] Groundwater monitoring | Minnesota Pollution Control Agency (state.mn.us)

- **Contaminants of Emerging Concern (CEC):** The Department of Health has requested an increase in CWFs for FY24-25 to $10.4 million over the FY22-23 appropriation of $2.4 million. This increased capacity of the CEC Initiative would allow for more evaluation of PFAS compounds for health-based values.
- **Fish Contaminant Assessment**: The DNR currently samples fish tissue in 178 lakes and 12 rivers for mercury and PCBs at the FY22-23 appropriation of $350,000. The Clean Water Council has recommended an increase to of $910,000 for FY24-25 to allow DNR to sample fish routinely for PFAS.
- **Groundwater Monitoring**: The MPCA has been able to sample for PFAS on an *ad hoc* basis in 2013 and 2019, but additional funding would allow continued and consistent support for the effort over time. The Clean Water Council has recommending spending $2.0 million over the FY22-23 appropriation of $1.9 million.
- **River and Lake Monitoring**: The MPCA sets aside a portion of River and Lake Monitoring CWF appropriations for partner requests. In FY24-25, the Clean Water Council is recommending an increase in funding for this program to add targeted PFAS monitoring and additional lake monitoring in lake-heavy watersheds at local partner request. The goal would be to determine if Class 1 waters are meeting their designated use. PFAS monitoring costs $300-400 per sample.

Chloride Reduction: De-Icer [approved by Council for FY22-23]

Revised Policy Statement

The Clean Water Council recommends that the State of Minnesota implement the following actions to reduce chloride in Minnesota surface and groundwater:

- Fund the **Smart Salting applicator training and certification** program, and the MPCA's **chloride reduction budget** to support the development and maintenance of tools, resources, policies, trainings and assistance programs to reduce chloride pollution.
- Request that the Legislature give the MPCA the **authority to charge a fee** for chloride training.
- Provide **liability protection** for the Smart Salting program certified private winter de-icing applicators for reduced salt applications.
- Provide **research funds to develop new technology and alternatives** to chloride-containing de-icing chemicals, and best management practices.
- Encourage and support the **adoption of the MPCA's Chloride Reduction Model Ordinance Language** by local governmental entities.
- Have the MPCA convene and lead a stakeholder process to develop recommendations for **new labelling requirements** on bags of de-icing chemicals sold in Minnesota.

Problem

Chloride is a naturally occurring ion found in low levels in Minnesota surface and groundwater. Salt used for winter de-icing and water softening contain chloride. Chloride is not toxic in small concentrations. However, above 230 mg per liter (about one teaspoon in 5 gallons of water), chloride becomes toxic to freshwater fish and other aquatic life under long-term exposure. Once chloride enters our surface water (lakes, streams, and wetlands) and groundwater, it is not feasible and extremely expensive to remove it.

Winter de-icing salts are among the primary sources of chloride in Minnesota waters.

In the Twin Cities Metro Area (TCMA) winter maintenance activities use approximately 365,000 tons of chloride de-icer per year. The de-icing salts eventually wash into nearby lakes, streams and wetlands. Recent monitoring shows increasing chloride concentrations in surface water and shallow groundwater. Since it is very difficult and expensive to remove chloride from our surface and groundwater once it gets into water, reducing chloride at the source is necessary.

- **Inconsistent labeling** for de-icers creates confusion for consumers. De-icers can be labeled as "eco-friendly" or as an alternative to salt, but they may pose other problems for water quality. Currently there is not a standard for labeling de-icers for their potential threats to water quality.

Solution

1. **Training and Certification**. Continue the Smart Salting applicator training and certification program: The MPCA has a training program for private and public salt applicators, such as snow removal contractors and snowplow drivers. This has been a very successful program and has assisted winter maintenance programs in reducing salt application rates by 30% to 70%, without compromising public safety. The TCMA Chloride Management Plan and Statewide Chloride Management Plan include the Smart Salting training program as the top implementation strategy to reduce salt use in the winter. In the past, MPCA conducted this training with federal

funds, but those funds are temporary. The estimated operating cost for the training program in FY22 is $350,000/year. To qualify for the liability protection to private salt applicators, the applicator must complete Smart Salting training program to be certified. The State should continue to provide adequate funding to the MPCA's **Chloride Reduction Program** budget to support the development and maintenance of tools, resources, policies, trainings and assistance programs like MnTAP to assist communities in their effort to reduce chloride pollution.

2. **Allow the MPCA to Charge a Fee**. Currently the MPCA does not have the authority to charge a fee for the training that would defray some of the cost. Legislative authority will be required. There is more demand for these chloride reduction training than the MPCA can meet. By charging a fee to willing customers, the agency can meet the demand.
3. **Liability Protection**. Provide liability protection to certified private salt applicators against slip and fall lawsuits: The notion here is that private applicators certified through the Smart Salting program would be able to apply for liability protection. The private applicator industry and local stakeholders strongly support this proposal. Various groups introduced bills to this effect in the last three legislative sessions and it has passed several committees and one house; however, none was enacted into law.
4. **Research Funding for Alternatives**. Make research funds available to develop new technology and alternatives to chloride-containing de-icing chemicals. Research on new technologies and alternative de-icing solutions may allow for a shift in snow and ice management that protect water resources while maintaining public safety. A full list of needed research areas can be found in Section 5 of the TCMA Chloride Management Plan.
5. **Adopt Local Chloride Reduction Ordinances**. Encourage and support the adoption of the MPCA's Chloride Reduction Model Ordinance Language by local governmental entities. The model ordinances provide guidance for creating and implementing ordinances that will assist with reducing chloride pollution. The proposed new municipal stormwater general permit for the State (also known as the MS4 general permit) would require adoption of several of these ideas. The four focus areas in the guidance include:
    a. Occupational Licensure for Winter Maintenance Professionals
    b. Deicer Bulk Storage Facility Regulations
    c. Land Disturbance Activities
    d. Parking Lot, Sidewalk and Private Road Sweeping Requirements
6. **De-icing product labeling requirements**. The MPCA should convene and lead a stakeholder process to develop recommendations for new labeling requirements on bags of de-icing chemicals sold in Minnesota. The goal of this effort will be to convene a knowledgeable group of stakeholders from a variety of sectors to create language that will ensure that consumers are provided accurate and necessary information about the de-icing products they are purchasing and applying to Minnesota's environment. Some key areas that should be evaluated include, but would not be limited to:
    - Require complete ingredients list with percentages provided
    - Third party certification requirements for any statements about the products' environmental, pet and human safety
    - Provide "practical' temperature ranges (not temperature ranges that can only be achieved in a lab setting or over a time period of weeks for melting to occur)

- Report possible negative impacts of the product on surfaces, vegetation, water quality, and other
- Safety protocols for handling the products
- Guidance for proper application that includes:
    - Snow and Ice removal prior to application
    - Application rates that are based on research
    - Suggested equipment for proper application and proper spread patterns
    - Conditions in which product will not be effective or may create unsafe surfaces

Chloride Reduction: Water Softening [already approved by Council for FY22-23]

Policy Statement

The Clean Water Council recommends that the State of Minnesota implement the following actions to reduce chloride in Minnesota surface and groundwater:

- **Provide financial support and technical assistance to municipalities to reduce chloride discharges** and allow flexibility for how municipalities achieve these reductions.
- **Update the state plumbing code** to effectively prohibit the installation of new water softeners in Minnesota that use timers rather than on-demand regeneration systems.
- **Fund a program** for activities, training, and grants that reduce chloride pollution. Grants should support upgrading, optimizing, or replacing water softener units.

Problem

Chloride is a naturally occurring ion found in low levels in Minnesota surface and groundwater. Salt used for winter de-icing and water softening contain chloride. Chloride is not toxic in small concentrations. However, above 230 mg per liter (about one teaspoon in 5 gallons of water), chloride becomes toxic to freshwater fish and other aquatic life under long-term exposure. Once chloride enters our surface water (lakes, streams, and wetlands) and groundwater, it is not feasible and extremely expensive to remove it.

Residential water softeners among the primary sources of chloride in Minnesota waters.

The discharge of chloride from residential water softeners can end up in surface waters even after wastewater treatment. Reducing the need for chlorides in water treatment is a priority in Minnesota. However, there are obstacles to achieving chloride reduction.

- **Timer water softeners** are still available. Newer on-demand water softeners are more efficient than older models because they add salt when water demand requires it. However, water softeners are still on the market in Minnesota with a timer that will use salt at regular intervals whether the water requires it or not to remove hardness.
- If public water suppliers upgrade to central softening of water, excessive wastewater discharges of chloride may persist due to continued use of residential water softeners when they are no longer necessary to reduce hardness.

Solution

1. **Support municipal efforts to reduce chloride**. The State should provide adequate funding to provide municipalities financial resources to reduce chloride discharges. This includes funding programs offered through the Minnesota Public Facilities Authority and the Minnesota Pollution Control Agency's water softening grant program.
2. **Update the Plumbing Code**. The plumbing code would effectively prohibit the installation of new water softeners that use a timer using one of two options.
    a. Ion Exchange water softeners used primarily for water hardness reduction that, during regeneration, discharge a brine solution shall be of a demand initiated regeneration type equipped with a water meter or a sensor [based on a Wisconsin model]; or

   b. All water softening or conditioning appliances installed must meet the following criteria [based on a California model]:
      i. The appliance activates regeneration by demand control.
   c. An appliance installed on or after January 1, [insert desired year], shall be certified by a third party rating organization using industry standards to have a salt efficiency rating of no less than 4,000 grains of hardness removed per pound of salt used in regeneration. (This is the recommendation that MPCA suggests in Property Management training and in the Statewide Chloride Management Plan.)
3. **Fund activities, training, and grants that reduce chloride pollution**. The MPCA has several tools available to help municipalities reduce chloride pollution. Grants can be used to support rebates that homeowners and businesses can use to upgrade, optimize, or replace their water softening equipment.

White Bear Lake Area Comprehensive Plan Update

METROPOLITAN COUNCIL

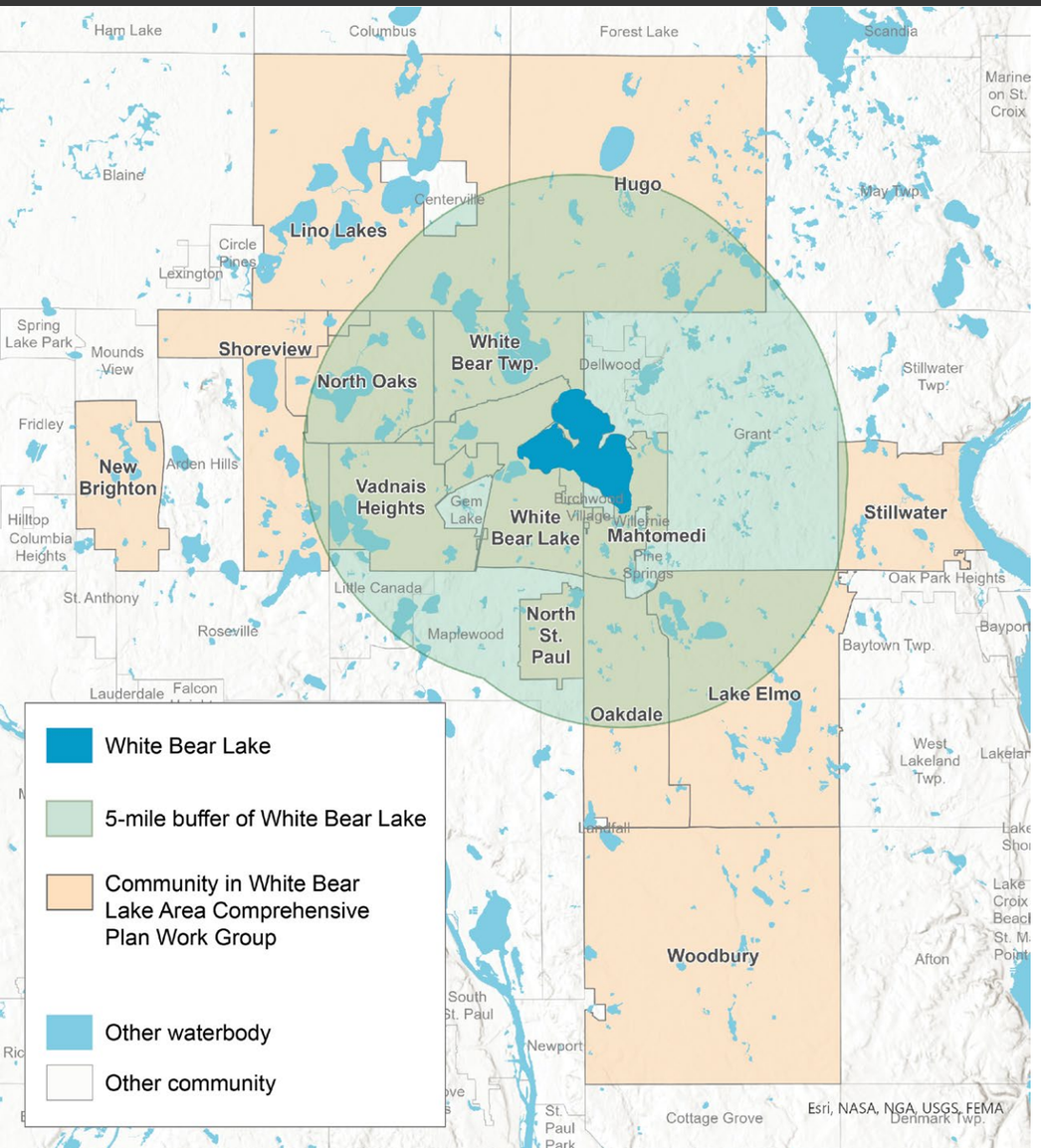
Clean Water Council Meeting December 16, 2024 metrocouncil.org

White Bear Lake Comprehensive Plan Legislation

- The Minnesota legislature provided $2 million in funding for the Metropolitan Council to form a work group to develop a comprehensive plan to ensure communities in the White Bear Lake area have access to sufficient drinking water to allow for municipal growth while ensuring the sustainability of surface and groundwater resources to supply the needs of future generations.

- The completed plan must be submitted to the Minnesota Legislature by June 30, 2027

White Bear Lake Area

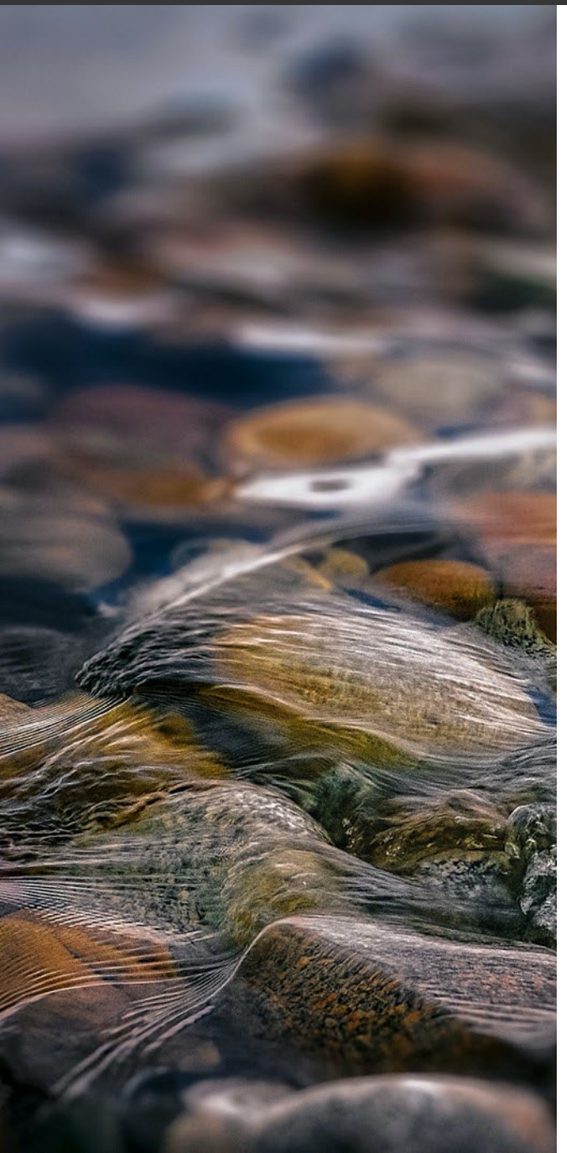


The Metropolitan Council has established a work group consisting of:

- Commissioners or designees from the DNR, MDH, and MPCA
- Representatives from Metropolitan Area Water Supply Advisory Committee (MAWSAC) and St. Paul Regional Water Services
- The communities of Stillwater, Mahtomedi, Hugo, Lake Elmo, Lino Lakes, North St. Paul, Oakdale, Vadnais Heights, Shoreview, Woodbury, New Brighton, White Bear Lake, White Bear Township, and North Oaks

These communities combined have a water service population slightly overly 300,000 people or approximately 10% of the metro region's total population.

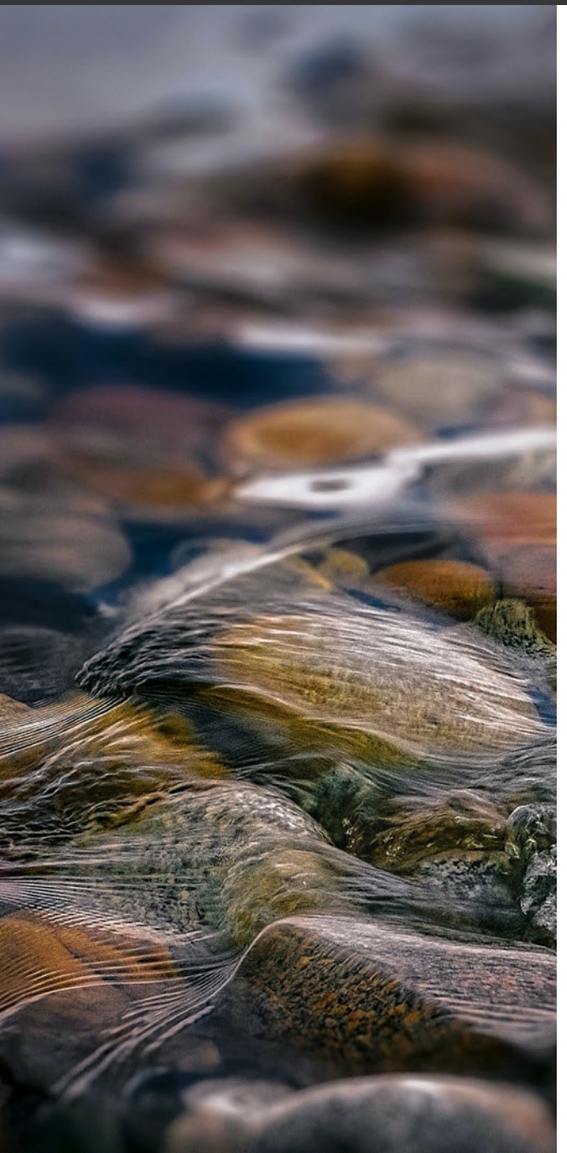
Legislative directives slide #1



1. Evaluate methods to conserve and recharge groundwater include four main areas to address:

- Converting water supplies that are groundwater dependent to total or partial supplies from surface water
- Reuse water, including water discharged from contaminated wells
- Projects designed to increase groundwater recharge
- Other methods for reducing groundwater use

Legislative directives slide #2

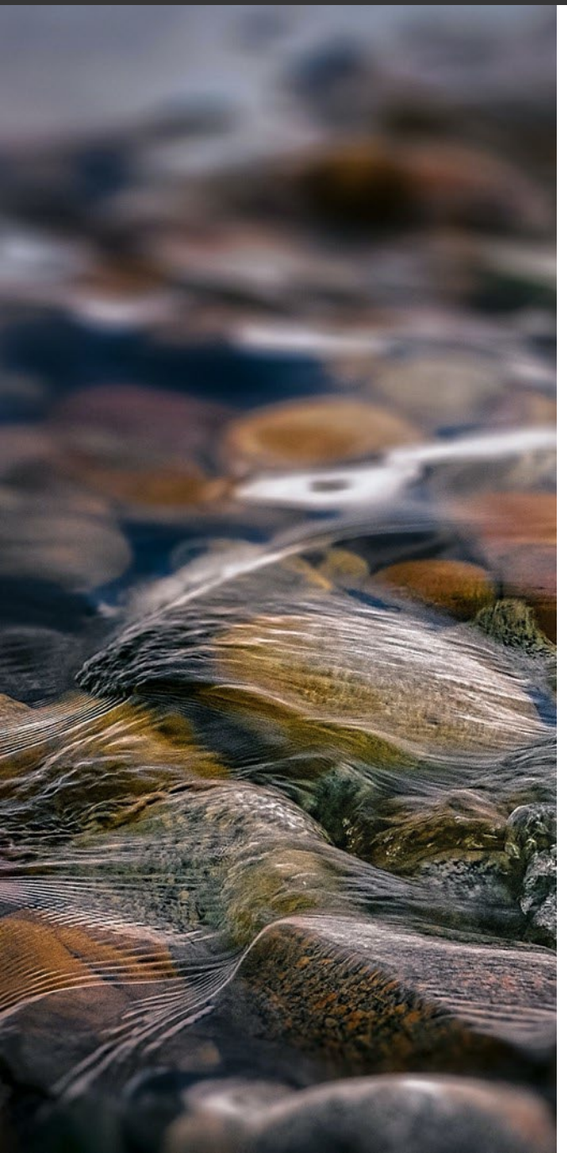


2. Determine which existing groundwater supply wells, if converted to surface water sources, would be the most effective and efficient in ensuring future water sustainability in the area

3. Identify a long-term plan for converting groundwater supply wells identified in clause 2 to surface water sources

4. Include any policy and funding recommendations for converting groundwater supply wells to surface water sources, treating and reusing wastewater, and any other recommendations for additional measures that reduce groundwater use, promote water reuse, and increase groundwater recharge

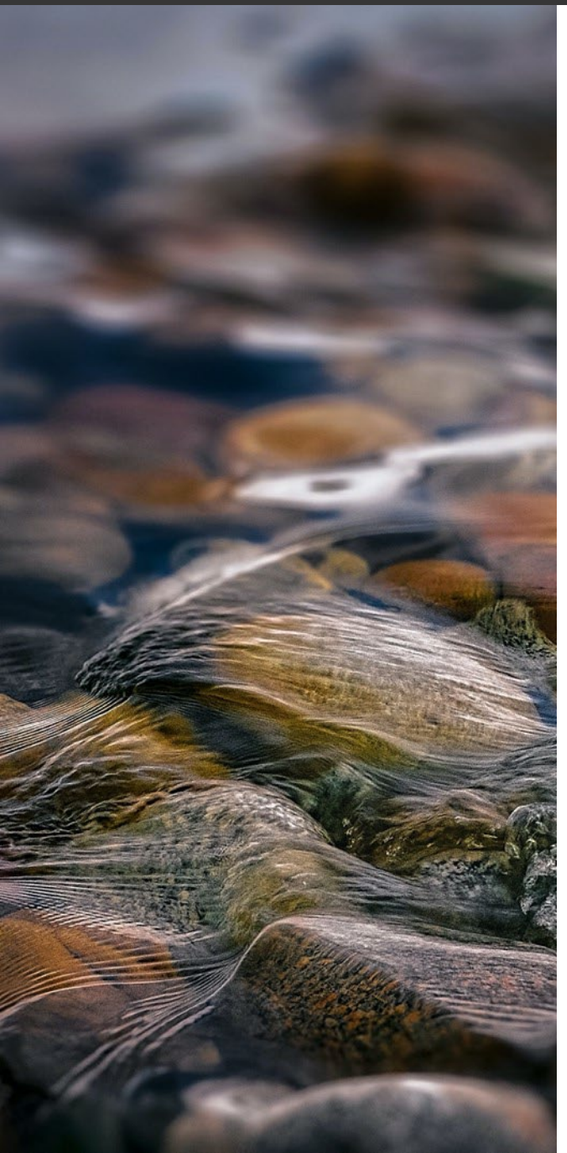
Legislative directives slide #3



5. Include any policy and funding recommendations for local wastewater treatment and recharge

6. Submit plan to the chairs and ranking minority members of the House of Representatives and Senate committees and divisions with jurisdiction over environment and natural resources finance and policy by June 30, 2027.

Schedule



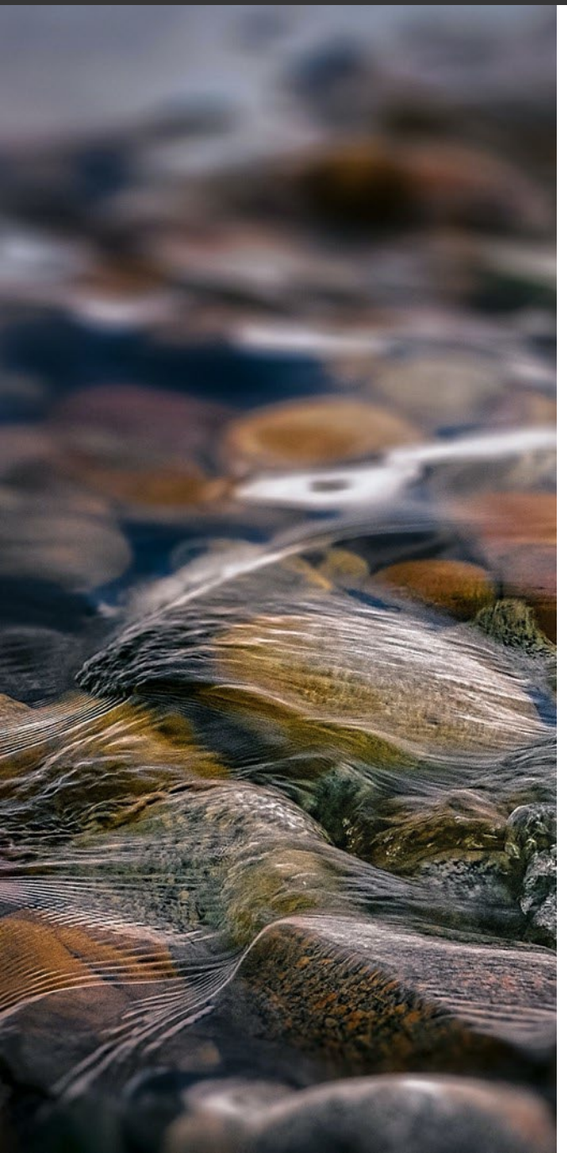
Milestone	Date
Schedule and hold one-on-one meetings with each of the group members	Completed
Work Group kickoff meeting and finalize problem statement	Completed
Work group meetings to agree on and advise on studies needed for the project	Completed
Update technical studies	2025
Update financial studies	Late 2025-2026
Agree to final recommendations and begin preparing final report	Late 2026
Submit final Metropolitan Council adopted plan to the House of Representatives, Senate committees, and divisions with jurisdiction over environment and natural resources finance and policy	June 30, 2027

Work progress for 2024 (1 of 8)

Finalized Problem Statement

Ensure equitable access to sufficient, safe, and affordable water for communities in the North and East Metro areas to meet current and future needs while safeguarding the sustainability of surface water and groundwater resources.

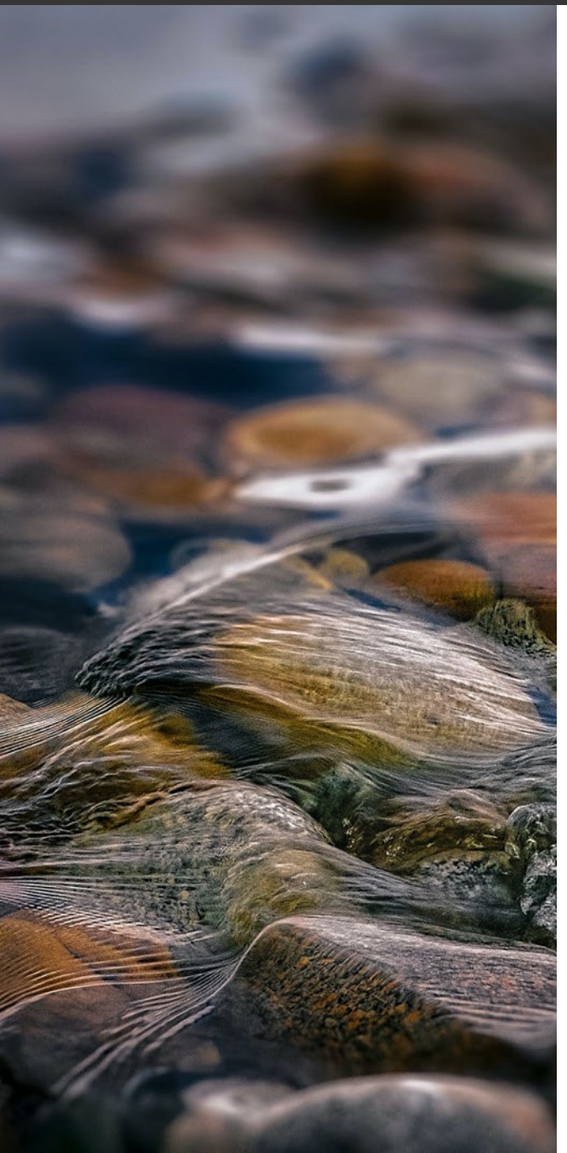
Work progress for 2024 (2 of 8)



Evaluate methods to conserve and recharge groundwater include four main areas to address:

1. Converting water supplies that are groundwater dependent to total or partial supplies from surface water
2. Reuse water, including water discharged from contaminated wells
3. Projects designed to increase groundwater recharge
4. Other methods for reducing groundwater use

Work progress for 2024 (3 of 8)

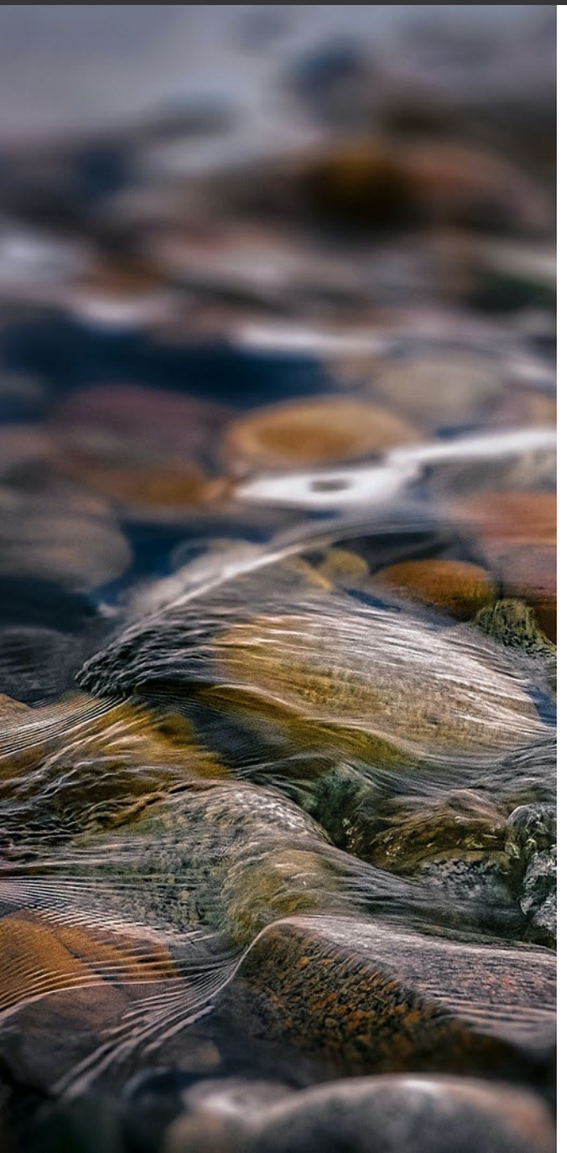


Converting water supplies that are groundwater dependent to total or partial supplies from surface water

Top 3 ranked solutions to evaluate

1. Redirect stormwater to augment White Bear Lake
2. Convey treated surface water from St. Paul Regional Water Services to north and east communities
3. Construct a regional surface water treatment plant near the chain of lakes in the north metro and convey treated surface water to north and east communities

Work progress for 2024 (4 of 8)



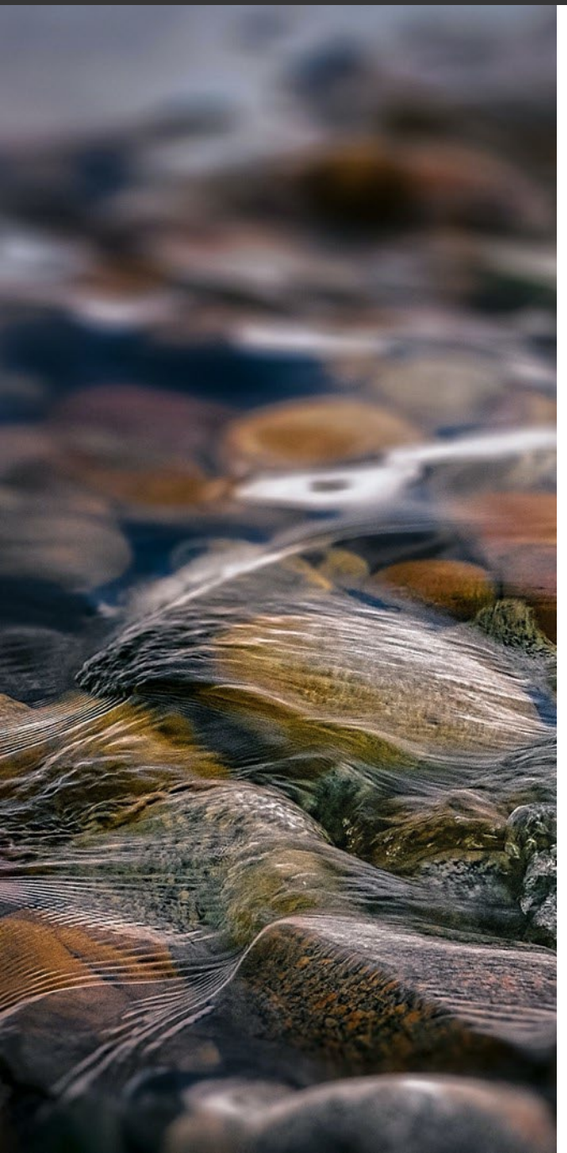
Reuse water, including water discharged from contaminated wells

Top 3 ranked solutions to evaluate

1. Reuse of treated wastewater from local Met Council interceptors for industrial and agricultural users
2. Stormwater reuse for irrigation
3. Reuse water discharged from contaminated wells

MPCA is completing a feasibility study for Project 1007 to treat PFAS and reuse the water from 12 groundwater extraction wells for potable reuse.

Work progress for 2024 (5 of 8)

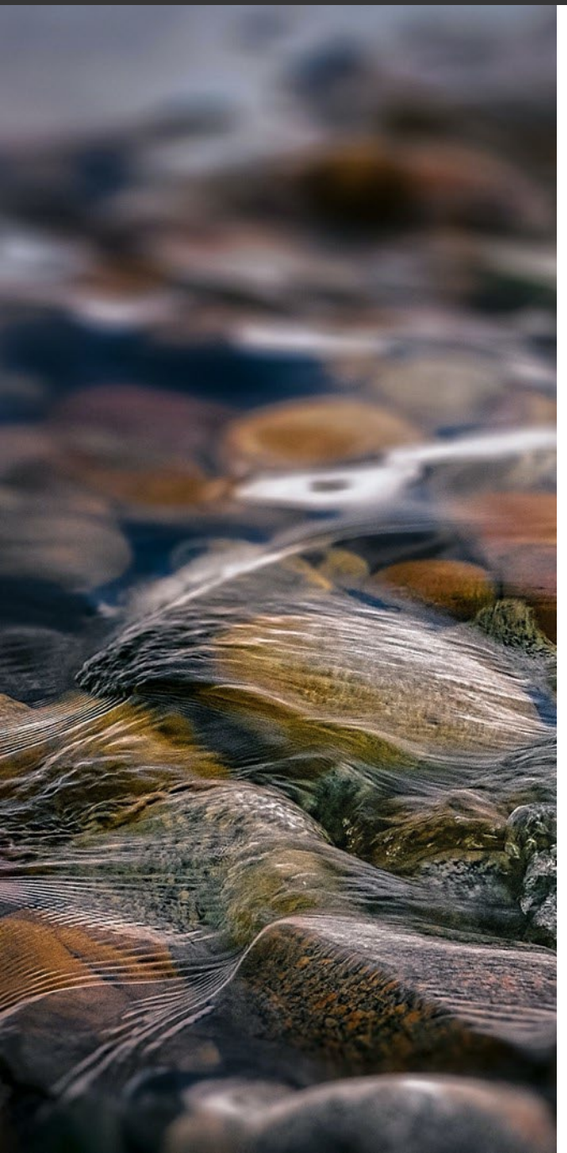


Projects designed to increase groundwater recharge

Top 3 ranked solutions to evaluate

1. Lake augmentation by pumping treated surface water from the Rice Creek chain of lakes into White Bear Lake
2. Treat wastewater from local Met Council interceptors and inject the treated wastewater into the aquifer to raise groundwater elevations
3. Stormwater collection and infiltration to raise groundwater elevations

Work progress for 2024 (6 of 8)

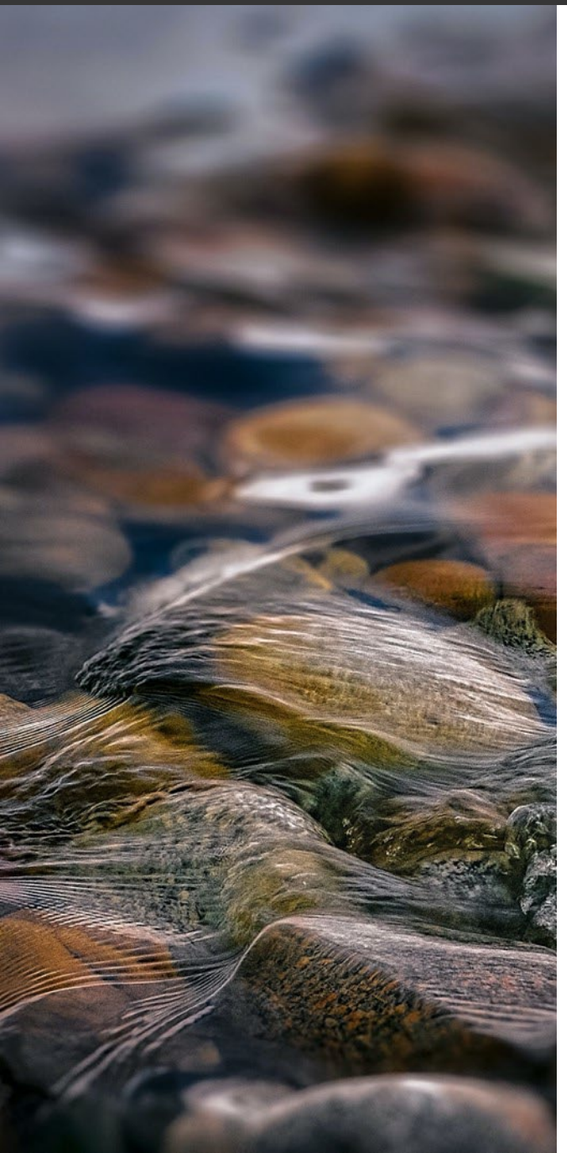


Other methods for reducing groundwater use

Top 3 ranked solutions to evaluate

1. Lawn watering restrictions (day of week and time)
2. Implement/require/encourage non-potable water reuse for irrigation and process water
3. Tiered increasing block water utility rates

Work progress for 2024 (7 of 8)



New issues and potential solutions

- Future PFAS impacts, treatment requirements, and long-term costs
- Raising outflow elevation of White Bear Lake to increase storage capacity of lake
- Maintain existing groundwater wells as a backup supply source to a potential surface water system and study the feasibility of using them as peaking wells
- Reductions from alternative low input turf grasses

Work progress for 2024 (8 of 8)

Water demand projections

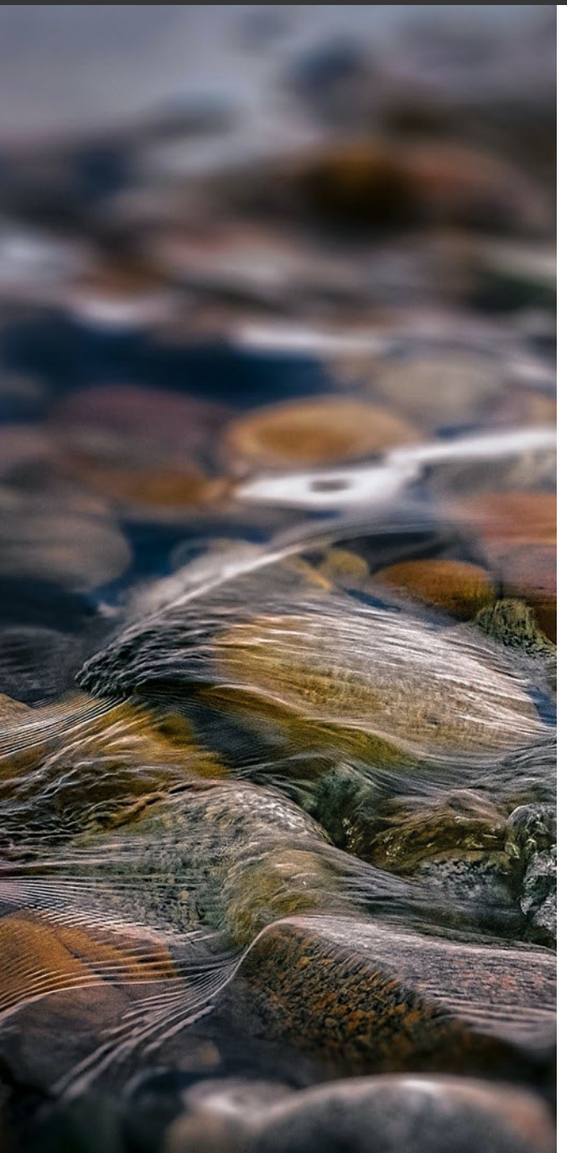
- Provide agreed-up projections to the DNR for updating the groundwater model to estimate future long-term impacts to White Bear Lake if communities remained on groundwater supply public water systems.

- Provide consistent projections for each of the consultants for sizing future infrastructure needs and estimating water conservation potential for each of the potential solutions to be evaluated.

Next Steps (1 of 2)

- **Next meeting date:** 1-3 pm on Thursday, February 4, 2025
- **Presentation** - DNR groundwater modeling update for future conditions in White Bear Lake Area using new water demand projection information
- **Presentation** - MPCA Project 1007 feasibility study

Next steps (2 of 2)



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Questions

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Metropolitan Council

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