Clean Water Council Budget and Outcomes Committee (BOC) Meeting Agenda Friday September 8, 2023 9:30 a.m. to 12:00 p.m.

Webex Only

2023 BOC Members: Steve Besser (BOC Vice-Chair), Dick Brainerd, Gary Burdorf, Steve Christensen, Warren Formo, Brad Gausman, Holly Hatlewick, Annie Knight

9:30 Regular Business

- Introductions
- Approve agenda & most recent minutes
- Chair and Staff update
 - o Communications Plan: Taglines, Legacy web page

9:45 Timeline and Process for FY26-27 Clean Water Fund Recommendations

• Feedback requested

10:00 Upcoming Biennial Impaired Waters List

- Leya Charles, MPCA Impaired Waters List Coordinator
- 10:45 BREAK
- 11:00 Follow-up from Strategic Planning Discussion on Expectations for the Clean Water Fund
- 11:45 Public Comment
- 12:00 Adjourn/Topics for Next Meeting

Budget and Outcomes Committee Meeting Summary Clean Water Council (Council) August 4, 2023, 9:30 a.m. to 12:00 p.m.

Committee Members present: Steve Besser (Committee Vice Chair), Dick Brainerd, Gary Burdorf, Steve Christensen, Brad Gausman, and Annie Knight.

Members absent: Warren Formo and Holly Hatlewick.

Others present: Council members Marcie Weinandt, Peter Schwagerl, Jason Moeckel, Glenn Skuta, Tannie Eshenaur; Dave Weirens (BWSR); Brad Redlin (MDA); Jen Kader (Met Council); Danielle Isaacson (MDA); Laura Schreiber (Land Stewardship Project); Jeff Broberg (MN Well Owners Association); Tom Gile (BWSR); Jess Jarcek (MDA); Marita Bujold, Lori Cox, Karuna Ojanen

To watch the WebEx video recording of this meeting, please go to <u>https://www.pca.state.mn.us/clean-water-council/policy-ad-hoc-committee</u>, or contact <u>Brianna Frisch</u>.

Regular Business

- Introductions
- Approval of the August 4 agenda and March 3 meeting summary, moved by Dick Brainerd, seconded by Gary Burdorf. Motion carries.
- Chair and Staff Update
 - Reports on programs supported by the Clean Water Fund, for reviewing at member convenience (included in meeting packet):
 - The Minnesota Geologic Atlas program, which includes a map of the counties that have completed a geologic atlas. These atlases use Clean Water Funds (CWFs) to help pay for them. There are two parts. Part A (geologic atlas) and Part B (groundwater atlas) completed by the DNR.
 - The Industrial Water Conservation Grant Summary Report, by the Minnesota Technical Assistance Program (MNTAP).
 - The Minnesota River Basin River Watch (2022-2023 program report).
 - The August meeting will look at surface water with some small group discussion.
 - September will be the field tour in the metro area.
 - Public comment has been added to this meeting.

Election of chair (Webex 00:27:00)

- The chair is chosen by committee members. The previous chair did not seek re-appointment.
- Motion by Dick Brainerd for Steve Besser to be Chair, seconded by Steve Christensen. Motion Carries by unanimous vote. Steve Besser is chair of the BOC.
- Vice Chair position is now open. Steve Christenson nominated Dick Brainerd as vice chair; the nomination seconded by Gary Burdorf. Motion carries by unanimous vote. Dick Brainerd is vice chair of the BOC.

Public comments (Webex 00:31:00)

- Karuna Ojanen, Minnesota Well Owners Organization (MNWOO) (public member): For Jason Moeckel (DNR), what kind of 50 permits were suspended because of drought? (Mentioned in introductions.) Were any industrial groundwater withdrawal permits suspended? Answer: The permits suspended are for surface water withdrawal from small rivers. They are typically used for irrigation, sand and gravel washing. No suspensions of public water supply, and none from a groundwater source.
- Laura Schreiber, Lands Stewardship Project (LSP) (public member): They are hosting a field day that all council members are welcome to attend! This is on August 23rd at Ravenview Farm in Jordan, MN. They use many soil health practices, that may be interesting for people to see on the working farm.
- Jeff Broberg (public member): There are a group of nonprofit organizations have <u>filed an emergency petition</u> to the United States Environmental Protection Agency (EPA) under the safe drinking water act, regarding an eminent threat to health with water quality in the karst area of southwest Minnesota. There is a critical situation, which is a compound issue between the geology, land use, old wells, and other items. There are many good efforts happening to prevent the contamination. There are initiatives happening doing good work

(i.e., like cover crops). However, from a public health standpoint, we are concerned about the wells that people keep finding contaminated. The conservation programs will not be successful for a decade or longer. The people with these well issues need a solution now. We are not going to drill our way out of this problem. It will require treatment or alternative water supplies. These are areas we want to ask for help in, with the EPA on the safe drinking water act. Provisions include the protection of underground sources of drinking water that also help private well owners (not just municipalities and those traditionally served). They would be happy to brief the committee in the future. *Response from Tannie Eshenaur, Minnesota Department of Health (MDH):* On the Minnesota Center for Environmental Advocacy (MCEA) petition to the EPA, the agencies are working together on this issue and have each met individually with the EPA and soon will meet as a group with the EPA. The Council should be aware of this petition and the situation in southeast Minnesota. Jeff is spot on in pointing out that the challenge is the difference in the timeline for environmental restoration versus public health intervention is quite stark, decades versus days.

Marita Bujold (public member): Is the DNR is organizing a long-term solution for water management for rivers and streams considering our circumstances - like unpredictable weather conditions. I understand that beavers are being deployed strategically and monitored to build health in the water systems and as part of ongoing strategies to revive water systems and ecosystems. I agree with you that this strategy requires ongoing monitoring. I also mentioned that Canada has a surplus of beavers and they have found ways to manage their populations to avoid problems of beaver activity in locations where they are not wanted. Response from Jason Moeckel, DNR: Streams experience high flows and low flows as part of a natural cycle. They are working to relax the constraints during low flows, to make sure the human induced activity is not exacerbated in causing the low flows to occur more frequently or severely. When they get multiple years of repeated low flows, they are stressing the system. There are some principles to operate on and have protected flow measures to reduce the stress on the flow. With climate change, what might they anticipate in changes with frequency in low patterns in the state. The Council has heard about this recently. The state of Minnesota has recently experienced the thirty wettest years on record. For many of the watersheds, it meant an additional four inches of rain fall (variable across the state). Not all goes into the ground but moves across the landscape. This effects river systems. The low flows were higher. Now, there have been three years of drought, impacting those systems. All the things this Council has been working to support (like stream buffers, water storage, stream health), which ultimately help the landscape be more resilient. It is complex. Regarding the beavers, they are a natural part of the landscape. We have been able to use those systems but would be challenged if the beavers returned to previous levels. It may be useful in some contexts but would create other challenges. There is a lot of infrastructure, and beavers can really mess with infrastructure.

BWSR: Buffer compliance and Watershed Project Tracking Tool, by Tom Gile, BWSR (Webex 00:49:00)

- This is to reveal the buffer compliance and watershed project tracking tool. Regarding buffer compliance, starting in January 2017 to January 2023, the state has shifted into greater buffer compliance (94-100 percent in each county). It is now more about maintenance.
- Statewide, 35 counties are fully compliant, and 52 counties have enforcement cases in progress at some level. Additionally, active enforcement cases in progress (watershed districts and counties) include: 424 corrective action notices (CANs), 77 administrative penalty orders (APOs) active, and 2,459 of enforcement cases are resolved. The goal is to help people come into compliance.
- Enforcement:
 - The Board of Water and Soil Resources (BWSR) enforcement was for only counties that did not elect jurisdiction. There were 103 parcels subject to enforcement. There are 5 active CANs and 3 active APOs. There are 95 resolved.
 - Other enforcement considerations: Compliance is always a best estimate based on local reporting and regularly fluctuates. The numbers presented only represent those parcels that have formal enforcement actions in process. Many Soil and Water Conservation Districts (SWCDs) identify non-compliance and work with the landowners to resolve it voluntarily before initiating formal enforcement actions with counties/watershed districts, or BWSR.

Questions/Comments:

Dick Brainerd: Of all the formal enforcement actions, which ones have been taken? What does that look like
across the board? How much is resolved voluntarily? Answer: It depends on the individual enforcement entity.

The CANs is the first formal written communication from the enforcement authority to a landowner letting them know they are out of compliance. Timelines are given to come into compliance. Counties and watershed districts can give an APO, and the penalty can begin to accrue for the landowner being out of compliance. It does vary from county to county. Counties can also have civil proceedings, which can be used in land use enforcement. Additionally, the 103E state drainage code does have different authorities, and those drainage authorities also have other mechanisms depending on the status. It is a complicated web of options that exist.

- Laura Schreiber (public member): What was the percentage of land held by non-operating landowners? Answer: The Minnesota Department of Agriculture (MDA) might have a more accurate number, but I have heard numbers that range from forty to sixty percent. I can do some more digging on it.
- Steve Christenson: The charts reflected increasing buffer zone compliance. Are these buffer zone increases yielding measurable water quality improvements? *Answer:* Yes, it is highly site specific. Anecdotal evidence would reveal it does as well.
- Steve Besser: Have you seen any change in the attitudes of the landowners? *Answer:* Some of that early discussion on the buffer law did not include a lot of feedback from those involved. As most landowners get into the process and engage with the local government units, people are a little more comfortable at this point. Most have recognized there is flexibility to make it work within their system. It is case by case, and over time. As people have figured out ways to make things fit, the negative attitudes have whittled down a bit.
- Paul Gardner: One other item to mention. In response to local watershed managers who have completed a comprehensive watershed management plan, BWSR and the local watersheds are collaborating on a watershed project tracking tool. It is a locally led effort. There are multiple metrics to follow. It would be a good visual tool. It is only getting started now. As it evolves, the BOC may want to hear more about it.

Minnesota Agricultural Water Quality Certification (MAWQCP), Letter/discussion from NGOs (Lori Cox) (Webex 01:08:30)

- A letter from a coalition of groups is included in the meeting packet.
- *Comments/Questions:*
- Lori Cox (public member): Thank you for letting us talk on this topic today. MAWQCP has a responsibility to participate in and support efforts to achieve the State's water quality goals. Implementation and priority statutes are also crucial to protect public and environmental health while considering fishable, swimmable, drinkable waters, where over half of Minnesota waters are currently impaired. Additionally, statute declares that the Council must recommend methods of ensuring that awards of grants loans, or other funds from the Clean Water Fund specify the outcomes to be achieved and specify standards to hold the recipient accountable for achieving those desired outcomes. This may come in the forms of using available data to report on reduction strategies in specific areas. In watersheds, it could be collaboration with public health and bio monitoring studies, or other clearly defined approaches to reducing agricultural nitrogen, phosphorus, sediment, erosion, pesticide, herbicide, fungicide, and impaired groundwater wells and drainage pollution in our waters today. Instead of hearing it's too expensive we should understand with actual data and dollars what an effective outcome specified water quality program would look like for ag pollution reductions in surface waters and groundwater. Availability in public agencies is not measured in how large or small your budget is, nor how many resources you employ.

As a farmer here for almost 9 years, I've worked very closely with my SWCD, NRCS and FSA offices to implement conservation. When we arrived at our farm here as an example, we didn't know about a massive gap in the landscape caused by perennial tillage with no conservation measures. Our soils in this area take days to weeks to infiltrate. We are landlocked in my area with no navigable waters. However, Carver Creek is to our north, Bevans and Silver Creeks are to our south, and all are impaired and flow to the Minnesota River and leading to the Mississippi. We had erosion that measured 400 feet and five feet deep in my field, running through two neighboring parcels measuring over a thousand feet in total. It was twenty-five feet deep where our bluff moves into the next parcel to the southeast, taking an entire line of mature trees with it. Through my SWCD, I was provided with a cost share, along with my own funds, to install perennial seedlings, seeding along the buff, WASCOB, (water and sediment control basin), and a small berm. I immediately began planting cover crops as I was planning my crop areas and could watch what happens during a season on our topography. I've been continually no-till cover cropping, and only till with a disk when I need to. I use no pesticides, herbicides,

fungicides in that field, but instead rely much on what a balanced ecosystem provides, with 10% of that field being pollinator CRPs. My fertilization is by bone and blood meal, readily available for plant uptake, and it stays where it's placed mimicking how soils have recycled from millennia. We also have perennial fruits. I've also garnered endorsements offered by the program for soil, health, wildlife, and climate, to continue my cover cropping efforts.

We wish you to consider our changing climate, exemptions allowed for producers, very vulnerable and impaired well areas, and how funds are being used, as well as acknowledge outside funding for ag conservation, including newer federal dollars, and provide fully measured outcomes expected of this program. We absolutely appreciate everything the Council has done and will continue to do to ensure clean water goals and implementation strategies for all Minnesotans. I want to say, thank you and welcome to those who are serving new on the committee.

- Jeff Broberg (public member): This is an aspirational program that would have benefits to our local water quality. However, we really don't focus enough on the groundwater aspects of that. MNWOO has learned that the foundation to engagement with groundwater is water testing. Local owners who test their well frequently enough understand if there are changes needed for treatment. It engages people to think about their water. It helps to test their water annually, so they know the trend of their water, and if their practices are protective.
- Marita Bujold (public member): I think it is important for any programs run with public dollars to have built in evaluations and outcomes clearly defined. We need to understand unpredictable weather conditions and adapt evaluation. By normalizing good conservation practices with successful outcomes, people will participate and will feel connected.
- Karuna Ojanen, MNWOO (public member): MAWQCP is an aspirational program that needs to have some kind of teeth associated with it. At your previous meeting, there was a lot of data on the program, but none on the improvement of water quality. Water quality as a result of agricultural pollution, pesticides and nitrates, has increased. The cities of Cold Spring, Saint Peter, Unita, Mankato, La Salle required nitrate treatment systems or blending in order to provide high quality drinking water. Agriculture is exempt from many clean water laws. Private well owners have no recourse. It can be an environmental justice issue since well users may not have the financial resources to get clean water (i.e., drill a new well). There has to be well testing, and perhaps water testing on drain tile output. The water quality of groundwater and surface water is degrading. I want to encourage more outreach, and perhaps make it mandatory across the state.
- Brad Redlin, MDA: Happy to have been at the last meeting talking about the program outcomes and measurements developed with the University of Minnesota. Thank you for the feedback. We continue to evolve and improve and that is foundational to our approach and risk assessment system. We provide means and methods for isolating risks on farms and respond with practices that reduce that risk. We like being held to a higher standard. The certification program is a risk assessment done by walking on every part of the farm (rented or owned). We review everything.

Regarding risk assessment, the tool looks at risk assessments, and has nothing to do with estimating outcomes. It is to identify problems and mitigate those problems. In this broad sense, every mitigation is guaranteed to improve the water because we found the actual risks and sources for water problems. It operates differently than any other conservation innovation or intervention in the state, or the nation. It does it on a whole farm basis. Additionally, we try to incorporate advancements all along. We only do practices that are conservation practice standards and that are scientifically verified. We are looking at this group's idea of a stipend. We are working on a proposal to the federal government to stand up more ambassadors, especially those in DWSMAs. There are a few items of concern in this letter, like blocking out ag industry representation or corn and soybean rotations that comprise most agriculture in Minnesota, and we want to be there for every Minnesota farm.

Tannie Eshenaur, MDH: I just came back from the national environmental health association meeting, and
private wells is becoming a national topic of concern. The MAWQCP has a technical assistance committee, and
the MDH was just asked to join it. Following that, I asked for a meeting with Brad for betteir collaboration
between the MDA and MDH when it comes to drinking water concerns. I wanted to share those here. One, to
consider a special endorsement for drinking water concerns. Staff are pursuing this avenue. Second, when

they do the inspection of the farm, this includes the SSTS system to check if it is a risk to water. I asked if there could be a similar process for private wells, so that may also be moving forward.

- Peter Schwagerl: I am not a member of this committee but wanted to comment as a member of the Council. This program helps to serve as a risk assessment tool and as an agent of social change among landowners, farmers, and operators across the state. I feel like we want to make sure we are staying focused on the mission, and not sprawling into other arenas that may have other funding sources dedicated to them. For example, I am a little concerned about some of the testing requirements being thrown out there. To get good reliable data, requires consistent long-term testing to weed out any noise out there. Moving in that direction may not be a good use of our CWFs for this project. There are other agencies and programs that can do some of that testing for us. I could speak on the program, the pros and cons, but I want to make sure we are focused on what we want this program to accomplish and targeting our funds appropriately.
- Steve Besser: Peter, do you participate in that program? Answer: Yes, we have been certified for four years.
- Lori Cox: I appreciate the discussion with individuals and at the meetings. I think the issue is that it feels as if the program is operating as a silo and is irrespective of other actual measures out there, including some of the data that MDA collects within the same division. That is where I believe we have a mismatch and a want of a review after a decade and many millions of public dollars. It's time to ask ourselves, from the CWFs, is this getting at the items that are statutory mandated for the Council. I think as something matures and grows, as agencies mature and grow, look at the other initiatives to address some of these issues. The program should not be sitting by itself and not addressing those issues. I agree from the onset it was a risk assessment program. However, over time we now have different data saying if you are addressing risk, how is it affecting data we see today.
- Brad Redlin, MDA: We are open to new ideas. We want to make sure to use the best possible information to address the risks present. In turns of producing outcomes and data, we want to clarify that no one else does any higher degree in any other programs in the state than we do. In terms of reporting outcomes, we all do things at the same level as other (i.e., NRCS). At past meetings, I have argued we do more and account for more than other programs the CWFs support. I want to acknowledge that you are asking more of us than anyone else, and we welcome it and strive to achieve it. I don't want any newer folks to think that we don't.
- Peter Schwagerl: As we are really focusing on outcomes, if we want to get good outcomes data, it is probably not going to come as much from individual farm testing. There is a whole host of technological tools for high level landscape-based data. This can help tease out the correlations of farm practices, moving forward with more information. It is only getting better over time.
- Marita Bujold (public member): I have seen a demonstration of two farms nearby each other, comparing water off their land, with one being a lot more obvious of the water quality benefits of practices implemented on the land. *Response from Peter:* It is good to see how they show up on the landscape and help provide more answers. Yet, in this program, you do get a hyper look at each farm when certifiers come out to talk to us. If there is a particular runoff spot, you can see the benefits of practices. The risks can be very small and vary across the state. So, that risk evaluation is present. I am referring more on outcomes data and how we are evaluating the program that way, in a broader picture. We want it to be on millions of acres across the state. Ultimately, we will need to look at high level correlations between practices and water quality certified farms relative to watersheds on a larger scale, especially as this program continues to mature. As more farms get involved, more acres involved, to see what data we can tease out. Speaking as a former scientist and researcher, those are the kind of big picture outcomes and correlations I would be interested in seeing. On individual farms doing individual spot testing, there can be a lot of noise in that data, as weather patterns and intricacies of a given year play out.
- Dick Brainerd: Thank you to everyone for bringing this forward and reviewing it. I don't have any answer for this item. However, I think it is very important to make sure we are supporting programs, and supporting what we want to see in Minnesota moving forward. What do we want to see for the next ten years? Do we want to see these programs modify and change to reveal it? There is a lot of information received today. This is a bigger issue, and there are other Council members who may want to weigh in on this topic.
- Steve Besser: Thank you for all the comments today. Thinking about the measurable outcomes concern, we really need interagency coordination. The program should maybe have some stated strategic goals, or aspirational goals, to help those farms to continue in the program.

- Annie Knight: In a perfect world, how much funding would you need to run this program with all the desired outcomes listed in the letter? *Answer from Brad Redlin (MDA):* That is a hard question. We know that the University of Minnesota has some new things in the works. From a scientific approach we are measuring data, and we want to pick the correct measurement. We are having conversations on remote sensing and a full mapping process that coordinates with data across the world. We want to do this in a way that will serve the state and our growers. Our estimation, full scale monitoring of certified farms is not feasible. More importantly, we feel like we are getting good value out of these funds.
- Paul Gardner: We do get mixed messages from the Legislature on monitoring. Some share that there is too much monitoring happening now, and it should shift more to implementation. Other legislators say there is a need to test more and to test for more things. The state seems like they need to make judgment calls on where they get diminishing returns for doing more monitoring, even on the larger scale. I would also note that the way our recommendations are written may give the idea that we have seventy different program silos. Even though there are some areas where we haven't done integration of some things yet its only because we are still learning as we are able to do more. There is a lot more integration within agencies, but also through agencies, coordinating the work. I appreciate all the members of the public who have spoken today. Lastly, when you come up with a policy that is too precise, it gets complicated. Average people don't get complexity and are turned off from participating. If you make something simpler, it is easier to grasp and people are more likely to participate, even though it may not seem as precise or efficient. I am pleased to say, every agency staff I've worked with has grappled with where that balance is found. I welcome this dialogue and appreciate those at this meeting today.
- Steve Besser: I would like to follow up later on this letter and topic. To see how Lori and Brad have continued this process. Additionally, a glossary would be good for new members, so they are informed about the acronyms used during our discussions.

Adjournment (Webex 02:24:33)

CLEAN WATER COUNCIL			
Budget & Outcomes Timeline for FY26-27		For Consideration by BOC 8 Sep 2023	
Blue items denote non-Council actions that affect timing of Council actions			
Scoping process with stakeholders (including agencies & legislators) begins	1-Nov-23	Review strategic plan, get high-level input	
State revenue forecast released	4-Dec-23	Approximate	
Scoping process with stakeholders ends	31-Jan-24		
CWC provides strategic direction/priorities to agencies	2-Feb-24	BOC meeting date	
State revenue forecast released	27-Feb-24	Approximate	
Agencies & BOC discuss strategic direction/priorities	1-Mar-24	BOC meeting date	
Brief overview of Research & Evaluation proposals to Council	18-Mar-24	Full Council meeting date	
Agencies present proposals to BOCResearch & Evaluation	5-Apr-24	BOC meeting date	
Brief overview of Monitoring & Assessment to Council	15-Apr-24	Full Council meeting date	
Agencies present proposals to BOCMonitoring & Assessment	3-May-24	BOC meeting date	
Brief overview of WRAPS, 1W1P, DW/GW, non-point, PFA to Council*	20-May-24	Full Council meeting date	
Agencies present proposals to BOCWRAPS, 1W1P, DW/GW, non-point, PFA*	7-Jun-24	BOC meeting date	
Draft BOC recommendations reviewed, discussed	5-Jul-24	BOC meeting date; this date won't work due to 7/4 holiday	
Public meeting for stakeholder input	15-Jul-24	Full Council meeting date	
Final BOC recommendations approved	2-Aug-24	BOC meeting date	
Full CW Council approval	19-Aug-24	Full Council meeting date	
CW Council submits non-agency requests to MPCA/Agencies send budget	31-Aug-24	not sure if this step will be needed?	
Final deadline to send agency budgets to Governor's office????	15-Oct-24	date used in past years is 10/15 (not sure if this step will be i	needed?
General Election	5-Nov-24		
November state revenue forecast released	25-Nov-24	Approximate	
Council adjusts recommendations in light of November forecast	16-Dec-24	Full Council meeting date	
New Legislature meets	7-Jan-25		
Final Council Recommendations to Legislature	15-Jan-25		
February state revenue forecast released, leads to final CWF budget target	24-Feb-25	Approximate	
New Legislature adjourns	19-May-25		
FY26 fiscal year begins	1-Jul-25		

* Acronyms: Watershed Restoration & Protection Strategies (WRAPS); One Watershed One Plan (1W1P); drinking water (DW); groundwater (GW) Public Facilities Authority (PFA)

MINNESOTA POLLUTION CONTROL AGENCY

Impaired Waters List – An overview

Leya Charles | Water Assessment and Impaired Waters List Coordinator

September 8, 2023

Agenda

Assessment Process

Assessment Consistency Technical Team (ACTT)

Assessment Guidance Manual

IWL Timeline

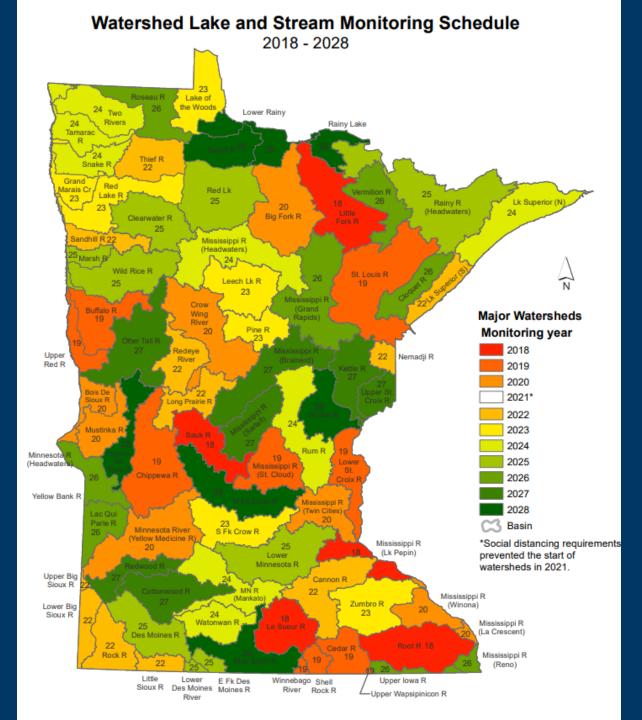
Assessment process

Watershed Monitoring Approach

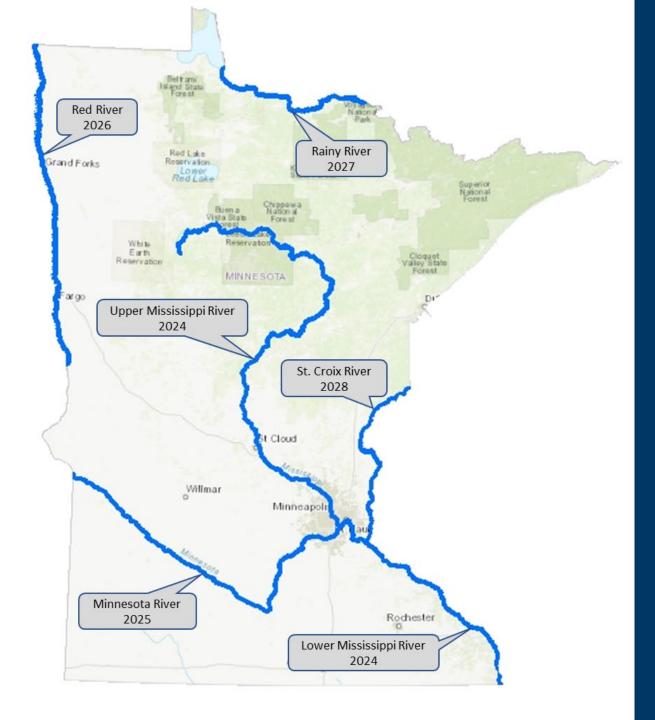
- 80 watersheds get monitored once every 10 years
- Samples collected for two years
- May September



Integrated watershed monitoring



Large river monitoring schedule



Assessment process

Watershed Approach

Watershed approach: 10 year monitoring & assessment

- Conventional pollutants
- Macroinvertebrates
- Fish

Statewide (toxic parameters)

State-wide approach: annual monitoring

- Trace metals
- Drinking water
- Sulfate
- Pesticides
- Fish mercury

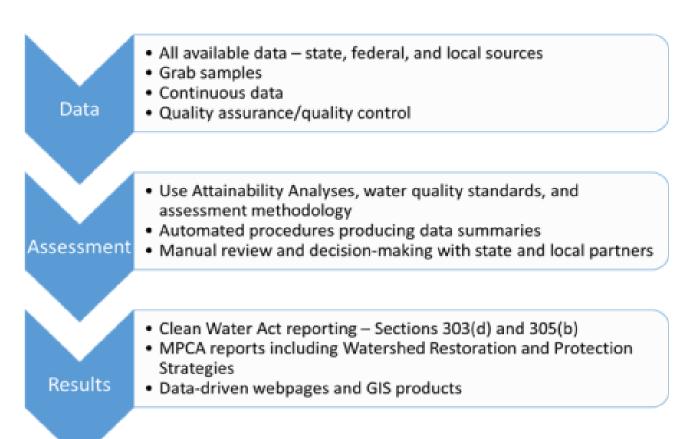
Assessment process

Opt-ins

- Waters outside of their scheduled assessment year
- Typically for delisting or recategorizations

Call for data

- November January
- EQuIS



Assessment database: Carl

- Pulls in data from many sources
- Records use judgements
- Synthesizes data for reporting

)+								▼ (ଟ (୦	_
			Name: Vermillio WID: 070400 Assess Year: 2023 Prev AY		View/Update W or Use-Level E Category			View Mod	er: 01230398 Ie: READ ONL' Ie: ADMIN	Y
				Use Judgm						
		QL ect - V	AQR AG		DW LS V	- Select -		.RV lect - 🗸		
	Rerun Review Req?									
			Currei	nt Impairment	Parameters					
Des. Use	Impairment Parameter	TMDL ID	Cycle First Listed	Category	Recat Type	Recat Status	Prior Recat	t Impairm	ent Status	
AQR	Fecal coliform	PRJ07701-001	2008	4A	Add Recat		N			(
AQL	Turbidity	PRJ07701-001	2008	4A	DELIST	Rejected	N			(
AQL	Dissolved oxygen		2010	5	Add Recat		N			
AQL	Benthic macroinvertebrates bioassessments		2012	5	Add Recat		N			(
AQL	Fish bioassessments		2012	5	Add Recat		N			(
AQC	Mercury in fish tissue	PRJ07770-001	2012	4A	Add Recat		N			(
				Add Impairm	ient					
			Follow-Up A	ctions				Vulnerab	e Status	
Previous Stat	tus/Assess Year None	I Monitoring 2 / None ect - 💙	WAT Follow-up None / None - Select - V	Strea	am Methods Not / None / None - Select -			AQL AQR I	AQC W DW LF	
		Comments					Sumr	nary Strings		_
Final (Comments AQL AQF			LRV Histo	G	ssess roup S	ummary	Param Review	Data Quality	-
Create N	lew Final Comment			Filter: - Sele Comment Cou		DW NO2NO	D3_DW_DATA	MTS 🗸	High 🗸	
Comment	t:						W_DATA	MTS 🗸	High 🗸	
	vater assessment is LS. DW ficient data to determine if			currently bei	ng	DW NO2_D	W_DATA	MTS ¥	High 🗸	

Assessment process

Three big steps, lots of small steps

- Technical expert parameter review
- Watershed Assessment Team (WAT)
 - Chemists, biologists, project managers
 - Made decisions on use judgements
- Professional Judgement Group (PJG)
 - MPCA staff, data partners, watershed organizations
 - Review use judgements
 - Bring up recategorization needs

4	A	В	С	1	D	E		F		G	
	WID	Station ID	Param Name 🛛 💌	Sample Fra	ction 🔹	oumpre bute		Month	-	Sample Time	-
2	69-0003-00	69-0003-00-202	SO4	Total		3/13/2	2022		3		14:27:00
;	69-0003-00	69-0003-00-202	SO4	Total		3/24/:	2022		3		13:20:00
L.	69-0003-00	69-0003-00-202	SO4	Total		4/19/2	2022		4		13:09:00
;	69-0003-00	69-0003-00-202	SO4	Total		5/11/2	2021		5		13:31:00
5	69-0003-00	69-0003-00-202	SO4	Total		6/2/2	2021		6		8:38:00
7	69-0003-00	69-0003-00-202	SO4	Total		6/7/2	2021		6		11:04:00
	69-0003-00	69-0003-00-202	SO4	Total		9/28/:	2021		9		15:38:00
]								
0											
1											
2	Sample Date	Result Value	10mg/L Standard					Sta	atio	n ID: 69-0	003-0
3	3/13/2022	13.4	10)							
4	3/24/2022	11.9	10								
5	4/19/2022	13.3	10)	14						
6	5/11/2021	11.8	10)	Se 13.5	;					
7	6/2/2021	11.6	10)	/alr						
8	6/7/2021	11.3	10)	> 13	3					
9	9/28/2021	11.3	10)	E 12.5	;					
0					Sal						
1					5 12	2					
	Overall Average	12.08571429			ອ ອີ11.5						
3					Ric	•				•	
4					P 11	L					
	Annual Average				≥ 10.5						
6	2021	11.5			10.3	, 					
7	2022	12.86666667			10)			-		
8					9.5						
9					9.3	,					
0					9						
1					4/:	14/2021 6/3/202	1	7/23/2021 9	9/11/20	21 10/31/2	021 12
2										Sample	Data
3										Sample	Date
4											
5											
6											
-	< ▶ 69-0003-	00 All 202NS 203	3NS 301NS 303		1	NS 506NS		n		n n	

Assessment process

Assessment Consistency Technical (ACT) Team

- 15 technical experts
- Since 2010

Comprised of EAO, Watersheds, supervisors, biologists, chem specialists, stressor ID staff, project managers, GIS specialist



EPA integrated report (IR)



Assessment Guidance Manual



305(b) Narrative Report



Impaired Waters List (Including ATTAINS Submittal)



TMDL Commitment List

IWL process

Assessment timeline

- December: Finalize partner data
- January: Prepare assessment database
- February: Technical experts assess
- March: WAT meetings
- April: PJG meetings
- May: Recategorizations
- June: Opt-ins

IWL timeline

- July-August: QA/QC and EPA reporting
- October: Internal & Tribal review
- November: public comment starts
- December: public meetings
- January: comment period ends
- February: respond to public comments
- March: Final IR report to EPA

Submittal to EPA on April 1, 2024

2024 IWL

• Changes to the IWL

- Waters wholly within Tribal boundaries
- Definitions clean-up
- TMDL commitment list
- 26 de-listed waters
 - 14 are from restoration activities

A	utoSave 💽 🗄 灯	• 6.	÷	202	2 FINAL Impaired Wate	ers List wq-iw1-73 - E	cel		♀ Search				
Fi	File Home Insert PageLayout Formulas Data Review View Help												
r	Cut	Arial		10 × A^ A	≡ ≡ ∎ ≫~	ab Wrap Text	Ger	eral		Iormal 2	Normal B	ad	
	Conv ×											×	
Pa		B I <u>∪</u>	~ <u>+</u>	~ 🔗 ~ <u>A</u> ~		🔛 Merge & Cent	er~\$	~ %)	€0 .00 Conditional Format as C	iood	Neutral	alculation 🚽	
	•			_			_		5				
-	Clipboard Fai Font Fai Alignment Fai Number Fai Styles												
A1	A1 • I × ✓ fr Water body name												
	А	с	D	E	F	G	н	1	J	к	L		
1	Water body name 🖅	Water body type v	Year added to List 💌		AUID 🗤	Use Class 💌	County	HUC 8 💌	Watershed name	Partial tribal	Affected design	ated	
2	Clubhouse	Lake	2016	Rainy River	31-0540-00	2B	Itasca	09030006	Big Fork River		Aquatic Consumpt	ion Mercury in fish tiss	
3	Coon	Lake	2016	Rainy River	31-0524-01	2B	Itasca	09030006	Big Fork River		Aquatic Consumpt	ion Mercury in fish tiss	
4	Little Spring	Lake	2014	Rainy River	31-0797-00	2B	Itasca	09030006	Big Fork River		Aquatic Recreation	n Nutrients	
5	North Star	Lake	2012	Rainy River	31-0653-00	2B	Itasca	09030006	Big Fork River		Aquatic Consumpt	ion Mercury in fish tiss	
6	Popple River	Stream	2014	Rainy River	09030006-512	2Bg	Itasca	09030006	Big Fork River		Aquatic Life	Dissolved oxygen	
7	Ruby	Lake	2012	Rainy River	31-0422-00	2B	Itasca	09030006	Big Fork River		Aquatic Consumpt	ion Mercury in fish tiss	
8	Shallow Pond	Lake	2014	Rainy River	31-0910-00	2B	Itasca	09030006	Big Fork River		Aquatic Recreation	n Nutrients	
9	Amber	Lake	2020	Minnesota River	46-0034-00	1C, 2Bd	Martin	07020009	Blue Earth River		Aquatic Life	Fish bioassessmen	
LO	Amber	Lake	2006	Minnesota River	46-0034-00	1C, 2Bd	Martin	07020009	Blue Earth River		Aquatic Recreation	n Nutrients	
11	Badger Creek	Stream	2020	Minnesota River	07020009-658	2Bg	Faribault	07020009	Blue Earth River		Aquatic Recreation	n Escherichia coli (E.	
12	Big Twin	Lake	2020	Minnesota River	46-0133-00	2B	Martin	07020009	Blue Earth River		Aquatic Life	Fish bioassessmen	
L3	Big Twin	Lake	2010	Minnesota River	46-0133-00	2B	Martin	07020009	Blue Earth River		Aquatic Recreation	n Nutrients	
L4	Blue Earth River	Stream	2020	Minnesota River	07020009-501	2Bg	Blue Earth	07020009	Blue Earth River		Aquatic Life	Fish bioassessmen	
15	Blue Earth River	Stream	2004	Minnesota River	07020009-504	2Bg	Faribault	07020009	Blue Earth River		Aquatic Life	Fish bioassessmen	
16	Blue Earth River	Stream	2020	Minnesota River	07020009-507	2Bg	Blue Earth	07020009	Blue Earth River		Aquatic Life	Fish bioassessmen	
17	Blue Earth River	Stream	2002	Minnesota River	07020009-508	2Bg	Faribault	07020009	Blue Earth River		Aquatic Life	Fish bioassessmen	
18	Blue Earth River	Stream	2020	Minnesota River	07020009-508	2Bg	Faribault	07020009	Blue Earth River		Aquatic Recreation	Escherichia coli (E.	
19	Blue Earth River	Stream	2020	Minnesota River	07020009-509	2Bg	Blue Earth	07020009	Blue Earth River		Aquatic Life	Fish bioassessmen	
20	Blue Earth River	Stream	2016	Minnesota River	07020009-509	2Bg	Blue Earth	07020009	Blue Earth River		Aquatic Life	Nutrients	
21	Blue Earth River	Stream	2020	Minnesota River	07020009-514	2Bg	Faribault	07020009	Blue Earth River		Aquatic Life	Fish bioassessmen	
22	Blue Earth River	Stream	2020	Minnesota River	07020009-514	2Bg	Faribault	07020009	Blue Earth River		Aquatic Recreation	n Escherichia coli (E.	
	Blue Earth River	Stream	2002	Minnesota River	07020009-515	2Bg	Blue Earth	07020009	Blue Earth River		Aquatic Life	Fish bioassessmen	
_	Blue Earth River	Stream	2004	Minnesota River	07020009-516	2Bg	Faribault	07020009	Blue Earth River		Aquatic Life	Fish bioassessmen	
	Blue Earth River	Stream	2020	Minnesota River	07020009-518	2Bg	Faribault	07020009	Blue Earth River		Aquatic Life	Fish bioassessmen	
_	Blue Earth River	Stream	2020	Minnesota River	07020009-565	2Bg	Faribault	07020009	Blue Earth River		Aquatic Life	Fish bioassessmer	
	Blue Earth River, East Branch	Stream	2004	Minnesota River	07020009-553	2Bg	Faribault	07020009	Blue Earth River		Aquatic Life	Fish bioassessmer	
	Blue Earth River, East Branch	Stream	2020	Minnesota River	07020009-553	2Bg	Faribault	07020009	Blue Earth River		Aquatic Recreation		
	Blue Earth River, East Branch	Stream	2020	Minnesota River	07020009-652	2Bg	Faribault	07020009	Blue Earth River		Aquatic Life	Benthic macroinver	
	Blue Earth River, East Branch		2020	Minnesota River	07020009-652	28g	Faribault	07020009	Blue Earth River		Aquatic Life Aquatic Recreation		
50	Dive Carth River, cast branch	Stream	2020	miniesota River	07020009-652	209	anoauit	07020009	Dide Latur River		Aquatic Recreation	Escherichia Coll (E.	

2024 Assessment guidance manual

- Changes to the Assessment Guidance Manual
 - Additional definitions
 - Added graphs/tables and maps
 - Sulfate assessments
 - Tribal waters reporting
 - Clarified deadlines and electronic submittal requirements for partner data
 - WUFPOWR appendix

Assessment Manual Assessing the Quality of Minnesota Surface Waters for Determination of Impairment: 305(b) Report & 303(d) Impaired Waters List

2024 Assessment and Listing Cycle

November 2023

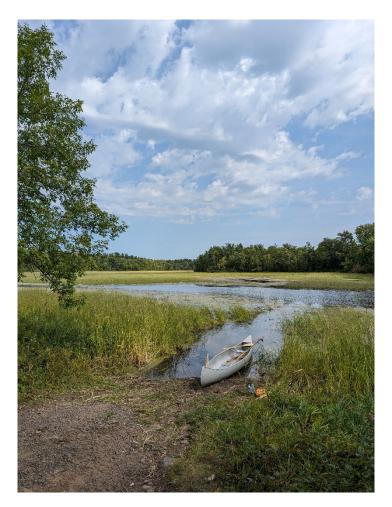


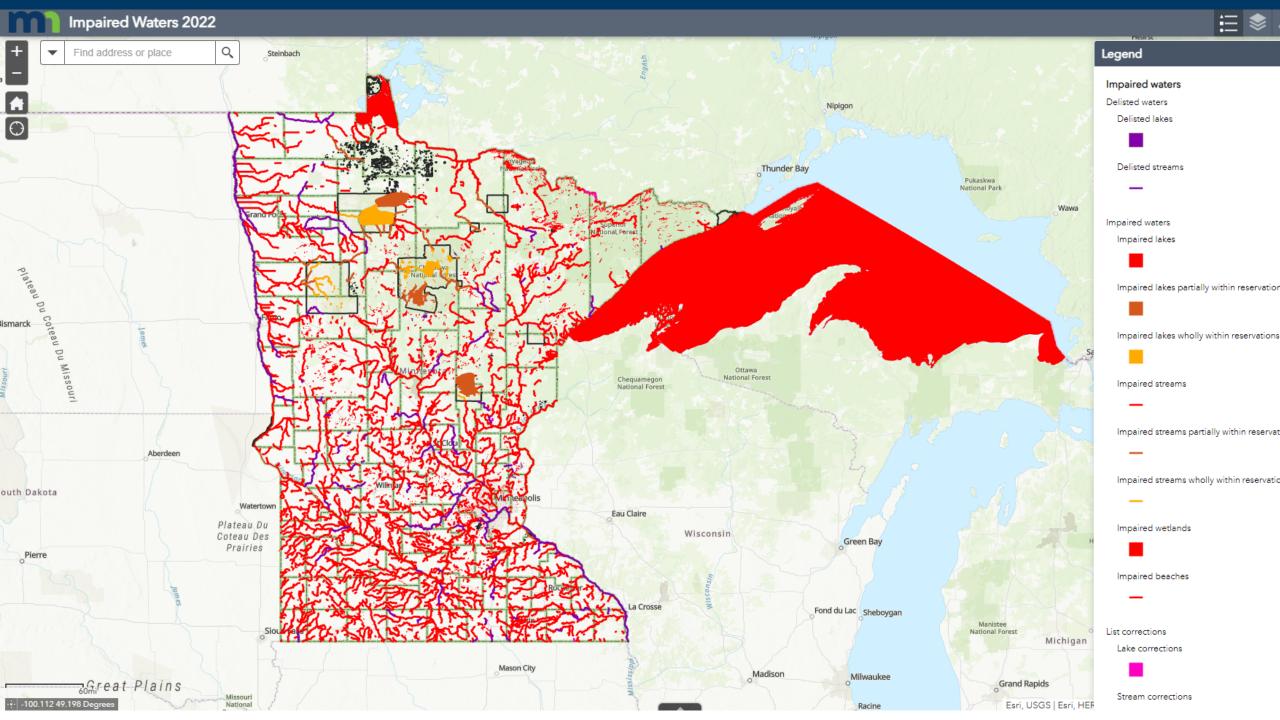
Water Quality Assessment

Wild rice waters

- Waters used for production of wild rice (WUFPOWR)
 - Included all waters which were proposed
 - 2,395

List will be included in the Assessment Guidance Manual for public comment.





Things to note

- MN monitors more waters more often than other states
- MN does not wait for stressor ID completion to place on the IWL
- MN assesses according to beneficial uses
 - Red doesn't necessarily mean bad
 - For example, water impaired for mercury for aquatic consumption, but has low nutrients, bacteria, and algae and is safe for swimming

Summary

- There are a lot of folks who work behind the scenes to make the IWL happen
- MN is ahead of many others states in terms of assessments, database management, and listing deadlines
- MN is very transparent to the public by hosting public meetings, spatial data viewer, and surface water data viewer

Wopida

Leya Charles

Leya.charles@state.mn.us

651-757-2510



9/11/2023