BOARD OF WATER AND SOIL RESOURCES

MN Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, MN 55155

May 29, 2024

Board Managers, Elm Creek Watershed Management Commission
c/o Judie Anderson
3235 Fernbrook Lane North
Plymouth, MN 55447

RE: Elm Creek Watershed Management Commission's Watershed Management Plan Update

Ms. Anderson,

This letter is in response to your March 29, 2024, email soliciting input for the next iteration of the Elm Creek Watershed Management Commission's (Commission) Watershed Management Plan (Plan). Thank you for the opportunity to provide preliminary input.

The Board of Water and Soil Resources (BWSR) expectations for the Plan update focuses on:

1) Process. Provide opportunities to discuss relevant topics and affirm, align, or change direction based on initial input and issue identification.
2) Coordination. Good planning is collaborative from the beginning and engages with multiple units of government, partners, and the public at many different levels of the process.
3) Plan Contents. Plans should focus on priority issues, clearly describe actions to be taken over the next 10 years, incorporate relevant and timely data and trends, and contain short-, mid-, and long-term measurable goals based on science, local priorities, and targeted implementation plans.
4) Organization Capacity. Incorporate authentic self-evaluation, accountability, and potential efficiency of implementation to create ambitious yet realistic goals.

The requirements for the planning process and Plan content are outlined in Minnesota Rule 8410 (https://www.revisor.mn.gov/rules/8410/) and Minnesota Statute 103B (https://www.revisor.mn.gov/statutes/?id=103B). Please reference these documents throughout the process.

Additional resources that may be helpful for developing implementation actions and measurable goals can be found in the *One Watershed One Plan Guidebook* (https://bwsr.state.mn.us/one-watershed-one-plan-resources):

- *Identifying and Prioritizing Resources and Issues* (pages 7-10)
- *Setting Measurable Goals* (pages 11-14)
- *Targeting Implementation Activities* (pages 23-26)

Note that these resources are useful for watershed planning across the region, regardless of whether a plan is developed as part of the One Watershed, One Plan process or metro update process.

Measurable Goals (*please refer to MN Rule 8410.0080*):

- The Plan must include goals for water quantity, water quality, public drainage systems, groundwater issues, wetland management, and any other priority issues identified during the input process.
- Goals need sufficient detail to determine what will be accomplished by the end of the Plan and whether success has been achieved. BWSR recommends the following process:
    - define a strategy to prioritize the top resource concerns;
    - create *specific* and *measurable* goals for implementation activities; and
    - develop metrics to measure progress.
- The Plan should be written to ensure that highly prioritized projects are targeted, making it easier to show how the Commission is addressing both resource and constituent concerns. A clearly prioritized and well-targeted plan can also help communicate the need for specific projects in terms of achieving water quality improvements.

Implementation Actions (*please refer to MN Rule 8410.0100 for additional requirements*):

- The Capital Improvement Program (CIP) should be clear in identifying what implementation actions the Commission will accomplish in the next ten years regardless of whether or not they receive any new grant funding.
  BWSR strongly recommends identifying priority resources in priority areas and to identify projects in those specific areas in you CIP. As identified in the PRAP, an internal analysis of the Commission's CIP was suggested. BWSR offers PRAP assistance grants for this type of exercise and is willing to work with staff and commissioners.
- Identify a specific process/methodology to evaluate progress towards achieving plan goals and implementation activities at a minimum of every two years.
- Define the Commission's process for evaluating implementation of local water plans.
- Define who is responsible for inspection, operation, and maintenance of stormwater facilities in the Commission.

A few specific comments as the Commission begins the planning effort are provided below.

- In the Commission's 2021 Level II Performance Review and Assistance Program (PRAP) Summary Report, BWSR commended the Commission for their progress on many levels. The report included a recommendation to consider development of clear prioritized, targeted, and measurable actions for future watershed management plans. The Commission must ensure that the Plan's organization and structure reflects a clear relationship between goals and their specific actions and sets clear, measurable outcomes that the actions will achieve.
- Results of the PRAP also indicated possible communication gaps with member cities, as well as a need for educating city officials of project benefits the watershed undertakes to achieve more member support. Please identify ways the Commission will improve communication with member cities and city officials.
- With precipitation patterns changing, watershed-wide modeling efforts are more important than ever. BWSR understands that a hydrologic/hydraulic (H&H) model will be completed as a separate exercise, and we applaud this necessary effort. An H&H model will provide critical information on the effects of frequency and intensity of rainfall patterns and progress towards load reduction goals and flooding concerns. While going through this effort, the Commission can work to address climate change and

resiliency while providing critical information that can protect infrastructure. Helpful tools may be found in BWSR's Climate Resiliency Toolbox (https://bwsr.state.mn.us/bwsr-climate-resiliency-toolbox).

- As the Commission continues to address agricultural related effects on water quality and quantity, strongly consider additional programmatic funding. BWSR recognizes current successful partnerships in the watershed knowing that increased funding for dedicated staff, cost share programs, or other approaches will only compliment the current work and lead to increased efforts on the ground.
- With the Commission's strong water quality monitoring program, the required trend analysis needs to be completed. This information will help prioritize water resources and associated targeted, measurable actions within the watershed.
- With the subwatershed assessments the Commission has completed, and continues to complete, consider utilizing BWSR Clean Water Fund grants for a cost-effective way to implement priority projects. Many funding opportunities are available that can be utilized for Commission goals.
- Even though groundwater is not likely a future source of drinking water, considering groundwater supply issues in the watershed, and exploring groundwater-surface water interactions is advised to better understand the relationship with the watershed.

Other comments:

- Once a first draft of the Plan has been prepared, we encourage you to submit this for an informal review to required review agencies, Advisory Committee(s), and other means of public participation to gather feedback to be incorporated into the final draft that is released for the official 60-day comment period.
- Please consider hosting a plan overview meeting to review and answer questions on the draft Plan with reviewers.
- When drafting the Plan, consider the various Commission audiences and strive to write the Plan with plain language principles in mind. Resources can be found at: plainlanguage.gov
- Please ensure the Plan is Americans with Disabilities Act (ADA) compliant.
- We encourage the Commission to consider elements of environmental justice and diversity, equity, and inclusion in their Plan update. The Environmental Protection Agency's EJScreen: Environmental Justice Screening and Mapping Tool can be a helpful tool in this work.
- As the Commission develops its plan, development timeline and public input process, please submit them for BWSR review. In this process, I encourage you to consider diversity, equity, and inclusion elements to ensure robust stakeholder engagement.

I look forward to providing additional input and BWSR assistance as the Commission works through development of the Plan. Please invite me to Board workshops, public input events and opportunities, and Technical Advisory Committee (TAC) meetings. My priority will be the TAC meetings, but I will likely try to attend some of the other input meetings and opportunities as well. If you have questions or need additional information, feel free to contact me by phone at 651-308-6956 or email at jennifer.dullum@state.mn.us.

Sincerely,

Jennifer Dullum

Jen Dullum
Board Conservationist

CC: Marcey Westrick (Central Region Manager, BWSR, via email)
State Review Agencies and MNDOT (via email)

- Megan Moore (DNR)
- Abby Shea (MDH)
- Jeffrey Berg (MDA)
- Maureen Hoffman (METC)
- Jeff Risberg (MPCA)
- Katie Kowalczyk (MNDOT)

May 30, 2024

Elm Creek Watershed Management Commission
c/o Judie Anderson, Administrator
3235 Fernbrook Lane
Plymouth, MN 55447

RE: Elm Creek Watershed Management Commission Watershed Management Plan Update

Judie Anderson,

Thank you for the opportunity to submit our priority concerns for inclusion in the Elm Creek Watershed Management Commission's (ECWMC) updated Watershed Management Plan (Plan), as well as the Metropolitan Council's (Met Council) expectations for the Plan outcomes. I have included a list of Met Council resources that may be of use in the Plan preparation.

Council Expectations and Priorities for Plan Preparation and Review
Met Council staff will review the plan through the lens of the Council's *Thrive MSP 2040* document which is the Regional Development Framework for the seven county Twin Cities Metropolitan Area and the *2040 Water Resources Policy Plan*, both of which can be found on the Council's web page (www.metrocouncil.org).

In particular, the *2040 Water Resources Policy Plan* (Policy Plan) includes policies and strategies to achieve the following goal:

> *To protect, conserve, and utilize the region's groundwater and surface water in ways that protect public health, support economic growth and development, maintain habitat and ecosystem health, and provide for recreational opportunities, which are essential to our region's quality of life.*

The Policy Plan takes an integrated approach to water supply, water quality, and wastewater issues. This approach moves beyond managing wastewater and stormwater only to meet regulatory requirements by viewing wastewater and stormwater as resources, with the goal of protecting the quantity and quality of water our region's needs now and for future generations.

The Policy Plan includes policies and strategies to:

- Maximize regional benefits from regional investments in the areas of wastewater, water supply and surface water management and protection.
- Pursue reuse of wastewater and stormwater to offset demands on groundwater supplies.
- Promote greater collaboration, financial support, and technical support in working with partners to address wastewater, water quality, water quantity and water supply issues.
- Promote the concept of sustainable water resources through collaboration and cooperation, with the region taking steps to manage its water resources in a sustainable way with goals of:

- Providing an adequate water supply for the region
- Promoting and implementing best management practices aimed at protecting the quality and quantity of our resources
- Providing efficient and cost-effective wastewater services to the region
- Efficiently addressing nonpoint and point sources pollution issues and solutions, and,
- Assessment and monitoring of lakes, rivers, and streams to direct adequate management, protection, and restoration of the region's valued water resources.

The updated watershed management plan should include policies related to the protection of area water resources with these strategies in mind, with the end goal of water sustainability.

In addition to being consistent with the Met Council's policy plan, the Plan also should include quantifiable and measurable goals and policies that address water quantity, water quality, recreation, fish and wildlife, enhancement of public participation, groundwater, wetlands, and erosion issues.

Met Council staff will be looking for the Plan to address the issues and problems in the watershed and to include projects or actions and funding to address them. At a minimum the Plan should address:

1. Any problems with lake and stream water quality and quantity, including information on impaired waters in the watershed and the Organization's role in addressing the impairments,
2. Flooding issues in the watershed,
3. Climate and resilience planning,
4. Information on emerging contaminants within the watershed, outlining watershed district and partners' roles.
5. Stormwater rate control issues in the watershed,
6. Impacts of water management on the recreation opportunities,
7. Impact of soil erosion problems on water quantity and quality,
8. The general impact of land use practices on water quantity and quality,
9. Policies and strategies related to monitoring of area water resources,
10. Policies and strategies related to use of best management practices,
11. Issues concerning the interaction of surface water and groundwater in the watershed,
12. Erosion and sediment control standards and requirements,
13. Volume reduction goals at least as restrictive as requirements in the NPDES construction general permit, and,
14. Capital improvement plan with itemized list of actions, estimated costs, and timeline.
15. Specifics on long-term maintenance of projects identified in the capital improvement plan, including identification of entities responsible for funding and conducting maintenance, as well as how long-term maintenance will be documented,
16. Specify to what degree the Plan may be adopted by reference by a local government unit for all or part of its local water plan. Additionally, please include information in the Plan on what information local municipalities must include in their local water management plans to receive approval from the ECWMC.

The Met Council also encourages the plan to leverage partnership opportunities where possible and to state them clearly within the Plan. We believe that to achieve productive and effective water governance within Minnesota we must all work together, this includes partnering with the cities and townships within the watershed.

Specific Priority Issues

Based on Council policies, the following issues are specific to the Elm Creek Watershed Management Commission and are viewed as priorities by the Council for inclusion in the Plan:

- Fish Lake, Elm Creek and Crow-Hassan Regional Parks are located in the watershed. The Council has made a substantial investment in the regional park system through its park implementing powers. Improvement of water quality in the watershed would likely have a positive impact on the park, through improving fisheries and wildlife and/or by reducing risks to public health. The Plan needs to address any issues, problems, capital projects, or land use changes related to the regional parks.

- The Met Council has updated its Priority Waters list, formerly known as the Priority Lakes list, which now includes rivers and streams. It will provide a key lens for developing policies and activities to include in the 2050 Water Resources Policy Plan. It will inform how the Met Council can align with the priorities of local and state partners, like the ECWMC, and provide value for the region.

  The list includes Fish Lake, French Lake, and Weaver Lake.

  While the list was developed after the adoption of the 2040 Policy Plan and is a foundational dataset for the 2050 Policy Plan, it would be appreciated if the ECWMC could include these water designations in the Land and Water Resources Inventory.

Available Council Resources

The Council has collected monitoring data for several water bodies within the Elm Creek Watershed Management Commission from 2014-2024.

Waterbody Type	Site	Monitoring Program†	Years of data
Lake	Teal Lake	CAMP	2020
Lake	Jubert Lake	CAMP	2015-2018
Lake	Lake Laura	CAMP	2014-2016
Lake	Cowley Lake	CAMP	2016
Lake	Sylvan Lake	CAMP	2014
Lake	DuBay Lake	CAMP	2014
River	Crow River		2019-2024

†CAMP = Citizen Assisted Monitoring Program; MCES = Environmental Services Lake Monitoring Program; WOMP = Watershed Outlet Monitoring Program

River, stream, and lake data can be downloaded by visiting the Met Council's EIMS website: https://eims.metc.state.mn.us/.

- **Local Planning Handbook:** The Met Council provides information about the cities and townships within your watershed boundaries, including community designations, forecasted population counts, generalized land uses, and other information that might be useful in your planning efforts.

  Local Planning Handbook – Metropolitan Council (metrocouncil.org)

- **Place-based equity research dataset:** The Met Council has published a new dataset, "Equity Considerations for Place-Based Advocacy and Decisions in the Twin Cities Region," that provides equity-relevant characteristics for each of the 704 census tracts in the Twin Cities region.

Formerly known as the Areas of Concentrated Poverty dataset, it has been expanded to provide a much more nuanced portrait of neighborhoods and their residents.

Place-based Equity Research - Metropolitan Council (metrocouncil.org)

- **Climate vulnerability assessment (CVA)**: The CVA is a tool that can assist in Met Council and community planning efforts in preparing and adapting to climate change because the CVA can reveal system vulnerabilities to currently occurring and, to some extent, expected climatic changes. Tools and resources currently include an extreme heat map tool and localized flood map screening tool.

  Climate Vulnerability Assessment - Metropolitan Council (metrocouncil.org)

- **Growing shade, tree canopy enhancement and preservation tool**: Growing Shade combines local stories and an interactive mapping tool to inform tree canopy enhancement and preservation. The tool, designed in partnership with The Nature Conservancy and Tree Trust, allows users to generate reports based on various presets like climate change, conservation, environmental justice, and public health at a range of scales from city-township to census block groups. By combining different variables of your choosing, you can generate data to meet your specific needs, whether you want to set canopy goals for a community or produce supporting data for grant applications.

  Tree Canopy - Metropolitan Council (metrocouncil.org)

The Council is in the process of updating the 2050 Regional Development Guide and associated Water Policy Plan. It will be adopted in early 2025. If there are any significant changes to regional water policy that may affect the content of the Plan, we will bring them to your attention. Additionally, I will be happy to direct you to load spreadsheets and any other Environmental Services' data and analyses, as well as any spatial data, and look forward to serving on the Technical Advisory Committee during plan preparation.

Sincerely,

Steve Christopher
Environmental Analyst
Water Resources Policy and Planning
Metropolitan Council Environmental Services

cc: Jen Dullum, BWSR
Water Resources Reviews, Metropolitan Council

HENNEPIN COUNTY
MINNESOTA

May 31, 2024

Attn: Judie Anderson, Administrator
Elm Creek Watershed Management Commission
3235 Fernbrook Lane North
Plymouth, MN 55447

RE: ECWMC Fourth Generation Comprehensive Watershed Management Plan Kick-off

Dear Judie,

On behalf of Hennepin County, and specifically our Department of Environment and Energy, I'd like to thank you for the invitation to participate in the development of the Elm Creek Watershed Management Commission's (ECWMC) fourth generation Comprehensive Watershed Management Plan (CWMP). The County views ECWMC as a critical partner in our shared work to improve water quality and improve and protect natural and water resources throughout our area.

On March 29th, 2024, we received notice of your intent to develop your next CWMP, along with a request to provide information on our organization's water related issues, water management goals, official controls, and programs. Below is a summary of our current management plans and efforts which we felt directly aligned with the goals and objectives of your current and future CWMP.

- **Climate Action Plan**
  - In 2021, Hennepin County approved its first Climate Action Plan. This plan includes aggressive goals, such as to achieve net zero greenhouse gas emissions by 2050. Several of the strategies and actions in the plan have relevancy to the mission of ECWMC and its CWMP. These are listed in **Table 1**.

- **Natural Resources Strategic Plan**
  - In 2016, the Hennepin County Board adopted our first Natural Resources Strategic Plan, effective for 2015-2020. We are in the process of updating this plan, which will be the first to reflect recent county initiatives to build resiliency to, and mitigate impacts of, climate change, as well as incorporate initiatives to reduce disparities.

    Several of the goals, actions, and metrics listed above will be incorporated into the strategic plan. Others from the current Natural Resources Strategic Plan are listed in **Table 2.**

Hennepin County Environment & Energy
701 Building, 701 Fourth Avenue South, Suite 700
Minneapolis, Minnesota 55415-1842
www.hennepin.us/environment

Hennepin

- **Ditch Management**
  - The County still has jurisdictional authority under Minnesota Statute 103E over nine public ditches in Elm Creek's Watershed. These are shown in the table below, along with the cities the ditches lie within.

County Agricultural Ditch #	Other Name (if any)	City(ies)
3	South Fork Rush Creek (Larkin Rd. to Kalk Rd.); along with public laterals	Corcoran
6	North Fork Rush Creek (Co. Rd. 117 to Trail Haven Rd.); along with public laterals	Corcoran, Rogers
7		Corcoran
11		Maple Grove
12		Rogers
16		Corcoran, Maple Grove
21	North Fork Rush Creek (Co. Rd. 30 to US Highway 94); along with public laterals	Corcoran, Maple Grove, Rogers
22	Elm Creek (Maple Grove Parkway to Weaver Lake Rd.); along with public laterals	Maple Grove
26	Elm Creek (from Highway 55 to Co. Rd. 115); along with public laterals	Medina

  The extent of these public ditches can be viewed from our Natural Resources Interactive Map.
  - Many of these ditches, particularly those predominantly within Rogers and Corcoran, currently serve agricultural land uses and are anticipated to serve those land uses during the 10-year span of the fourth generation CWMP. ECWMC should continue working with Hennepin County to ensure drainage is preserved on these ditches. Our organizations can and should work together to pursue any opportunities to implement multi-purpose drainage management practices on and adjacent to these ditches that improve flood resiliency and/or water quality while also maintaining drainage.
  - Ditches predominantly in Maple Grove are now surrounded by developed lands, or will be during this 10-year plan, and will no longer serve the agricultural purposes for which they were constructed. Hennepin County does not see a need for these to be considered agricultural ditches if/when they no longer serve an agricultural land use and wishes to see these abandoned and fully brought under MN Department of Natural Resources (MNDNR) jurisdiction as public watercourses. County staff are interested in working with ECWMC and MNDNR staff during the course of the fourth generation plan to determine how authority of these watercourses could be passed to MNDNR to more appropriately manage these as streams/creeks when they no longer serve as agricultural drainage ditches.

- **Roadways and Facilities**
  - Hennepin County owns and operates several facilities and a transportation system within the jurisdictional boundaries of the ECWMC. As an MS4 permittee, Hennepin County has an obligation to make progress toward assigned Total Maximum Daily Load (TMDL) goals

and views our ongoing partnership with ECWMC and its participating cities as great prospects for collaboration. In addition, as a public entity without land use controls our facilities and our roadways represent some of our best opportunities to make progress on the goals of our Climate Action Plan and we are eager to work with our partners to explore prospects to do that in conjunction with our capital plan. Our staff will work with your organization to identify major opportunities for collaboration during our capital projects and welcome suggestions for collaboration within and outside those projects.

- **Natural Resource Grants**
  - ECWMC, and its partners, have been very successful in securing and implementing Natural Resource Grants within their jurisdiction. Since 2019, four Natural Resource Grants, including Good Steward and Opportunity Grants, have been awarded within ECWMC. These included an Opportunity Grant in 2019 to ECWMC for alum treatment on Fish Lake which led to the eventual delisting of the lake in 2024, an Opportunity Grant in 2019 to the City of Medina to construct a new stormwater pond on Hamel Road, an Opportunity Grant in 2023 with the City of Dayton to address ravine erosion on private property between Co. Rd. 12 and the Mississippi River, and a 2023 Good Steward Grant with Crow River residents Aaron and Angelica Evans to address severe bank erosion and stabilize the riverbank on their property. We hope to continue and build from these partnerships in the future.

- **Conservation Services**
  - Following the dissolution of Hennepin Conservation District, Hennepin County's Environment and Energy Department assumed responsibility for the District's services, including the unique role Conservation Districts can play in working with private landowners to implement conservation on their property. The County has partnered with ECWMC to implement several projects on private lands over the last five years to address erosion and reduce runoff. Recent project successes include completion of a Clean Water Fund Grant by Hennepin County in the Rush Creek Headwaters and continued implementation of watershed-based implementation funds in the Diamond Creek and Rush Creek subwatersheds. We look forward to continued partnerships in implementing conservation on private lands through partnerships such as these and wish to see strategies continuing and expanding this work included in the CWMP.
  - County staff have also worked with the commission to develop and implement several subwatershed assessments, including most recently the Diamond Creek and South Fork Rush Creek assessments. County staff wish to continue this work with the Commission, identifying and assessing opportunities to implement best management practices in targeted subwatersheds with water quality impairments and/or other concerns. Similarly, we'd like to see strategies in the CWMP for this work.

- **Additional Funding Sources**
  - Beyond Natural Resource Grants, Hennepin County has other opportunities to assist in planning and implementation, which includes grants for environmental education, aquatic invasive species prevention, tree planting, among many others. A full list of these opportunities can be found on our website.

Our staff looks forward to supporting this effort as you best see fit. We will be appointing Kevin Ellis (kevin.ellis@hennepin.us) to be our main staff contact participating in this planning effort, but I and other staff will also weigh in as draft CWMP materials are created and feedback is requested..

Please don't hesitate to reach out to me for any assistance we can provide.

Sincerely,

Kris Guentzel
Land and Water Unit Supervisor
612-598-1171 (office)
kristopher.guentzel@hennepin.us

Table 1: Goals, actions, and metrics as listed in Hennepin County's Climate Action Plan, which are relevant to the ECWMC CWMP.

Goal	Action	Metric (if available)
Protect and engage people, especially vulnerable communities	Mitigate the heat island effect, especially in areas with people most vulnerable to extreme heat, by supporting increased access to air conditioning, increasing the tree canopy, and converting hardscape where possible to green infrastructure.	*Plant 1 million more trees by 2030 through partnerships with cities, TRPD, and other community partners.*
	Address flooding in housing, especially where people most vulnerable to flooding impacts live, by promoting and providing financial support for preventative measures such as sump-pumps and landscaping to redirect water away from structures.	*Identify the structures and properties most at risk for flood damage in Hennepin County and develop partnerships that will help reduce or eliminate flood damages and disruption by 2025.*
Enhance public safety	Identify areas at risk for all types of flooding, including flowing surface water (fluvial), standing surface water (pluvial) and subsurface water (groundwater flooding) and coordinate with public entity partners to create strategies for reducing risk, especially for vulnerable populations.	*Develop a mapping tool to comprehensively identify the sites most at risk for flooding of all types (fluvial, pluvial, and groundwater) to guide effective mitigation and response actions by 2022.*
Protect building sites, roads, infrastructure, and natural resources	Update stormwater design standards that will serve as a standard across Hennepin County lines of business to account for increased rainfall intensities.	*Develop stormwater design standards for mid-century precipitation projection and develop policies and practices for green infrastructure to manage precipitation projections by 2023.*
	Protect and restore streams, wetlands, floodplains, and uplands.	*Acquire 6,000 acres of additional conservation easements by 2040.*
	Reduce barriers to regional stormwater management by investing in partnerships, empowering staff to work beyond property line boundaries, and creating a policy for financial contributions to such projects.	
	Develop a groundwater plan that considers the impacts of climate change, including extreme weather events and wet/dry cycles, on groundwater resources and drinking water availability.	*Develop a groundwater plan by 2025 and an integrated water management plan by 2026*

Goal	Action	Metric (if available)
	Protect and restore natural areas, including streams, wetlands, floodplains, prairies, savannas, and forests, with a focus on supporting biodiversity and providing habitat for species that alter their range in response to climate change.	
Reduce emissions in ways that align with core county functions and priorities	Develop goals, prioritization frameworks, outreach, and marketing strategies to promote carbon sequestration projects in the most impactful places around the county.	
	Provide assistance to landowners wishing to adjust land management practices to increase the carbon storage of soils and sequester carbon in trees and plants. Examples of the types of projects the county will provide assistance for include: Agricultural soil health practices; Improved grazing and pasture management; Diversification of agricultural landscapes and crop types; Habitat restoration and protection; Expanded shoreline and buffer plantings.	
	Incorporate carbon sequestration potential into evaluation and planning of other natural resource and water resource projects and partnerships.	
	Track carbon sequestration and other benefits accrued from soil health efforts, land management improvement, habitat restoration and protection projects, and other related work on private lands.	

Table 2: Objectives, strategies, and actions listed in Hennepin County's Natural Resources Strategic Plan, which are relevant to the ECWMC CWMP.

Objective	Strategy	Action
Protect and restore lakes, rivers, and streams	Track the quality of the county's water resources	Use available data to track annual conditions on 50 reference lakes , monitor the state's impaired waters list and resulting Total Maximum Daily Load (TMDL) studies. Info will be shared with county board, partners and public.
	Protect and restore lakes, rivers, and streams	Participating on technical advisory committees to review watershed management plans, rule updates and environmental studies.
		Reviewing site and project plans.
		Participating in project pre-design and pre-construction processes.
		Conducting area-wide assessments regarding water quality, wetlands, erosion, and floodplain issues.
	Reduce the impacts of stormwater runoff through the implementation of best management practices	Promote the implementation of low-impact development and green infrastructure for newly developed and redeveloped properties, agricultural best practices, wetland restorations and innovative stormwater management practices where applicable
		Continue to research and implement state-of-the-art methods of applying chloride to reduce water pollution while maintaining safe roads
Protect groundwater resources	Support planning and education efforts to protect groundwater resources.	Identify additional data needs, and assess the susceptibility of our surface and groundwater resources to current and projected levels of groundwater withdrawal, contamination, and other threats
		Provide a forum for partner engagement in groundwater issues to improve related decision-making processes
		Work with the Minnesota Department of Natural Resources, the Minnesota Department of Health, and the Metropolitan Council to assist local communities in identifying groundwater protection needs and integrating groundwater issues with other local planning efforts
	Advocate for the cleanup of contaminated sites with the potential to significantly impact groundwater resources.	Work with state regulatory agency staff, municipalities, and, where necessary, landowners to advocate for the cleanup of sites that pose a high risk to the environment and/or human health.
	Seal abandoned wells to reduce the potential for groundwater contamination.	Provide cost-share grants to landowners, using a combination of county and state funding as available, to seal high-priority abandoned wells

Objective	Strategy	Action
Protect and restore wetlands	Identify the highest-quality wetlands to ensure their protection and determine impacted wetlands suitable for restoration.	Work with partners to conduct a thorough analysis of the function and environmental benefits of the wetlands in the county.
	Ensure the protection and preservation of wetlands through enforcement of Minnesota's Wetland Conservation Act.	County staff work with landowners who have wetland violations on their properties to restore the wetland to its pre-existing condition or to create a wetland of equal or greater value
		Participates on Technical Evaluation Panels, which provide a forum to discuss site-specific interpretations of WCA laws, rules, and technical data in order to avoid, reduce or mitigate wetland impact
		Track how well county-led projects are fulfilling WCA goals.
	Pursue creation and restoration of wetlands to establish wetland banking credits, mitigate losses and remediate impaired waters within the county.	Identify, evaluate, and pursue wetland restoration and funding opportunities on county-owned properties and tax-forfeited lands.
		Assist the Minnesota Board of Water and Soil Resources (BWSR) in locating willing county landowners with potential wetland restoration sites that may qualify for BWSR funds to restore their wetlands through BWSR's wetland bank road program.
		Evaluate identified wetland restoration opportunities on county properties, tax-forfeited lands, and other available sites to determine those that should be prioritized

MINNESOTA POLLUTION CONTROL AGENCY

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800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

May 1, 2024

Judie Anderson
Elm Creek WMC Administrator
3235 Fernbrook Ln N
Plymouth, MN 55447

RE: Elm Creek Watershed Management Commission 60-Day Priority Concerns Request

Dear Judie Anderson:

The Minnesota Pollution Control Agency (MPCA) appreciates the opportunity to provide input at the outset of the Local Water Plan Process in the Elm Creek Watershed Management Commission (ECWMC) located within the Mississippi River – Twin Cities Watershed. The MPCA has developed technical information, reports, total maximum daily load (TMDL) studies, tools, and potential strategies for the protection and restoration of water bodies that may be useful for inclusion in a local water plan.

We recommend:

- Incorporating and implementing strategies and goals from completed TMDL's and implementation plans
- Determine quantitative accounting of efforts and reductions you hope/intend to accomplish over the 10-year plan cycle relative to water quality targets
- Identify geographic priority areas and implementation to match those prioritized waters

Priority issues

The MPCA has identified several strategic goals including:

- Assist local partners to accelerate targeted reductions for identified priority impaired waters
- Assist to develop strategies to protect priority waters that are meeting water quality goals
- Reduce chloride to surface and ground water
- Protect groundwater
- Incorporate environmental justice into planning
- Increase community and environmental resilience to climate change

Links to reports and pertinent information can be found at:

- Mississippi River – Twin Cities Watershed TMDL page with TMDL's and Implementation reports
  - There is a section towards the top of the page for ECWMC as well as basin-wide projects at the top of the page.
  - Mississippi River - Twin Cities Watershed: TMDL projects | Minnesota Pollution Control Agency (state.mn.us)
- Mississippi River-Twin Cities Watershed monitoring reports
  - Mississippi River - Twin Cities | Minnesota Pollution Control Agency (state.mn.us)
  - We are expecting the stressor identification (SID) report to be on the website by mid-May.

- Point Source Phosphorus Mapping Tool: Provides summaries of annual phosphorus loads and flow volumes discharged from National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) permitted facilities since 2005. The phosphorus loads and flow volumes link on the page will take you to the mapping tool.
    - https://www.pca.state.mn.us/water/phosphorus-loads-and-flow-volumes
- MN Nutrient Reduction Strategy – Includes reduction strategies and a 5-year progress report.
    - https://www.pca.state.mn.us/water/nutrient-reduction-strategy#nutrient-strategy-718f1971
- Minnesota Stormwater Manual
    - https://stormwater.pca.state.mn.us/index.php?title=Main_Page
    - A section of the manual is related to applying better site design and may be helpful if reviewing development ordinances.
        - https://stormwater.pca.state.mn.us/index.php/Better_site_design
- MPCA funding options
    - https://www.pca.state.mn.us/business-with-us/grants-loans-and-contracts
    - Wastewater and stormwater financial assistance | Minnesota Pollution Control Agency (state.mn.us)
- Groundwater protections – Towards the bottom of the page there are reports on the groundwater condition and BMPs for groundwater protection.
    - https://www.pca.state.mn.us/air-water-land-climate/groundwater-monitoring

Background information:

Table 1 summarizes the status of waters within the ECWMC subwatershed boundary:

- 30 impairments are identified in the 2024 U.S. Environmental Protection Agency (EPA) approved 303(d) impaired waters list.
    - 27 have approved TMDL plans. Grey highlighted rows do not have TMDLs.
- Fish Lake (27-0118-00) was de-listed in 2024.

Chloride Reduction

The ECWMC has two chloride impairments. The major sources of chloride around the state include application of chloride-based salts for winter maintenance activities, residential and commercial water softening, and agricultural inputs.

Chloride reduction at the source is key to protecting water quality, as there are currently no known economically feasible remediation strategies to remove chloride once it enters the environment.

- The MPCA maintains resources (technical, educational, and financial) that may be of use to local partners in designing ways to reduce chloride.
    - https://www.pca.state.mn.us/water/statewide-chloride-resources.

Environmental Justice

The MPCA has resources to assist in identifying areas with environmental justice concerns. Increasing outreach and engagement can create a culture of meaningful involvement that could lead to addressing issues in communities that may be more adversely impacted than others.

- Understanding environmental justice in Minnesota (arcgis.com)
- MPCA and environmental justice | Minnesota Pollution Control Agency (state.mn.us)

Climate Change

Planning should incorporate changing weather patterns to help our communities be prepared for extreme weather events. Planning can include items such as:

- Requesting infrastructure be built for increased rainfalls
- Having collaborative discussions about what to do in the event of a major disaster
- Plan for impacts to natural resources. Fish communities could become more stressed as warming waters lead to decreased oxygen or plan for diversifying vegetation/trees when restoring or stabilizing areas.
- https://www.pca.state.mn.us/air/climate-resilient-communities
- Climate adaptation resources | Minnesota Pollution Control Agency (state.mn.us)

Table 1. Impaired Lakes and Streams.

Water body name	Water body type	Year added to List	AUID	Affected designated use	Pollutant or stressor	EPA category	Year TMDL approved
Elm Creek	Stream	2024	07010206-508	Aquatic Life	Total suspended solids (TSS)	4A	2017
		2014		Aquatic Life	Benthic macroinvertebrates bioassessments	4A	2017
		2014		Aquatic Life	Fish bioassessments	4A	2017
		2014		Aquatic Life	Chloride	4A	2016
		2010		Aquatic Recreation	Escherichia coli (E. coli)	4A	2017
		2004		Aquatic Life	Dissolved oxygen	4A	2017
Diamond Creek	Stream	2014	07010206-525	Aquatic Life	Fish bioassessments	4A	2017
		2010		Aquatic Life	Dissolved oxygen	4A	2017
		2010		Aquatic Recreation	Escherichia coli (E. coli)	4A	2017
Rush Creek	Stream	2014	07010206-528	Aquatic Life	Benthic macroinvertebrates bioassessments	4A	2017
		2002		Aquatic Life	Fish bioassessments	4A	2017
		2010		Aquatic Life	Dissolved oxygen	4A	2017
		2010		Aquatic Recreation	Escherichia coli (E. coli)	4A	2017
Rush Creek, South Fork	Stream	2014	07010206-732	Aquatic Life	Chloride	4A	2016
		2010		Aquatic Recreation	Escherichia coli (E. coli)	4A	2017
		2014		Aquatic Life	Fish bioassessments	4A	2017

		2014		Aquatic Life	Benthic macroinvertebrates bioassessments	4A	2017
Water body name	**Water body type**	**Year added to List**	**AUID**	**Affected designated use**	**Pollutant or stressor**	**EPA category**	**Year TMDL approved**
Rush Creek, South Fork	Stream	2014	07010206-760	Aquatic Life	Fish bioassessments	4A	2017
		2014		Aquatic Life	Benthic macroinvertebrates bioassessments	4A	2017
County Ditch 16	Stream	2022	07010206-761	Aquatic Life	Fish bioassessments	5	
Rice Main Lake	Lake	2010	27-0116-01	Aquatic Recreation	Nutrients	4A	2017
Weaver	Lake	1998	27-0117-00	Aquatic Consumption	Mercury in fish tissue	4A	2007
Fish	Lake	2024	27-0118-00	Aquatic Life	Fish bioassessments	5	
		2010	27-0118-00	Aquatic Consumption	Mercury in fish tissue	4A	2010
Goose	Lake	2018	27-0122-00	Aquatic Recreation	Nutrients	4A	2017
Laura	Lake	2020	27-0123-00	Aquatic Recreation	Nutrients	5	
Diamond	Lake	2006	27-0125-00	Aquatic Recreation	Nutrients	4A	2017
Cowley	Lake	2010	27-0169-00	Aquatic Recreation	Nutrients	4A	2017
Sylvan	Lake	2018	27-0171-00	Aquatic Recreation	Nutrients	4A	2017
Henry	Lake	2008	27-0175-00	Aquatic Recreation	Nutrients	4A	2017

We look forward to partnering with the ECWMC in the continued development of your local water plan. The MPCA is aware of the many efforts underway in the Mississippi River-Twin Cities Watershed. We hope to continue to work in cooperation with local governments in the watershed. If we may be of further assistance, please contact me, Amy Timm, at 651-757-2632.

Thank you again for the opportunity to provide our comments toward the development of your local water plan.

Sincerely,

Amy Timm

This document has been electronically signed.

Amy Timm
Environmental Specialist
Watershed Division

AT:jdf

Metro District, Water Resources Engineering Office Telephone: (651) 775-5915
Waters Edge
1500 W. County Road B-2
Roseville, Minnesota 55113

May 30, 2024

Judie Anderson, ECWMC Administrator
3235 Fernbrook Lane
Plymouth, MN 55447
judie@jass.biz

RE: 60-Day Review: DRAFT Elm Creek Watershed Management Plan 2026-2035 Initiation Notice

Dear John Loomis,

MnDOT Metro Water Resources Engineering (WRE) is offering these comments to the Elm Creek Watershed Management Commission's (ECWMC) Watershed Management Plan (Plan) Initiation Notice. We thank the ECWMC for allowing us to participate in the development and review of the 2026-2035 plan.

We offer the following comments to help relay our priorities for the next plan:

1. MS4 Permit Update: Align the watershed's standards with the most recent version of the MS4 permit to create consistency with definitions and requirements, including the definition for reconstruction on linear projects. For MnDOT projects, varying watershed and MS4 requirements may be present along a corridor for a single project. This can create challenges with project design and measuring different types of disturbance to adhere to varying triggers for linear projects. When new updates to standards take place, MnDOT requests the opportunity to review any updates.

2. TMDLs: MnDOT is responsible for stormwater management within our transportation corridors. MnDOT will work to ensure that road development, redevelopment and construction meets NPDES requirements within the watershed. For waterbodies with completed TMDL studies that provide a Waste Load Allocation (WLA) to MnDOT, MnDOT will include water quality stormwater treatment that considers the WLA on projects that are required to provide stormwater management.

   MnDOT requests communicating the status of current TMDL projects and monitoring results that demonstrate the effectiveness of activities being conducted to address the WLAs. MnDOT would like to be informed of opportunities to coordinate on watershed led efforts to improve impaired waterbodies where MnDOT could achieve the combined benefit of capital project compliance.

DEPARTMENT OF TRANSPORTATION

3. Infiltration: Infiltration provides the most effective stormwater treatment, and investigation into mapped infiltration prohibitions can be costly and cause delays. which may limit the ability to achieve stormwater management through infiltration practices. A geotechnical study to evaluate potential infiltration prohibitions to determine whether infiltration may be feasible could increase the ability to maximize infiltration practices in the watershed. Where infiltration is not feasible, we want to understand what other stormwater treatment options the watershed would promote to manage stormwater.

4. Operation and Maintenance of Stormwater Infrastructure: Maintenance of stormwater facilities presents a challenge for both public and private development who may not have expertise or resources in maintenance of specialized stormwater facilities, especially green infrastructure or underground facilities. The watershed is uniquely positioned to help coordinate a cooperative maintenance entity focused on helping increase the expertise as new types of facilities continue to be built. MnDOT would be interested in participating in conversations about partner funded and watershed led maintenance services.

5. System mapping: In order to obtain information on our stormwater infrastructure, you may contact either the MS4 Engineer, Jason Swenson at 651-234-7539 jason.swenson@state.mn.us or the MS4 Asset Management Specialist, Adam Schramka, at 651-234-7544 or adam.schramka@state.mn.us.

Thank you for including MnDOT in your plan review, and we welcome opportunities to collaborate in the future. Feel free to reach out to me at 651-775-5915 katherine.kowalczyk@state.mn.us with questions or concerns over these comments.

Respectfully,

Katie Kowalczyk, PE
MnDOT Metro Water Resources Engineer

Cc (via email): Ryan Rupp, MnDOT Hydrologist II
Jason Swenson, MnDOT MS4 Engineer
Jen Dullum, BWSR Board Conservationist

DEPARTMENT OF NATURAL RESOURCES

Central Region Headquarters
1200 Warner Road
Saint Paul, MN 55106

SENT VIA EMAIL: judie@jass.biz

May 31, 2024

Judie Anderson, Administrator
Elm Creek Watershed Management Commission
3235 Fernbrook Lane N
Plymouth, MN 55447

Re: Elm Creek Watershed Management Commission's Watershed Management Plan Update

Dear Judie Anderson,

This letter is in response to your notification soliciting input on Elm Creek Watershed Management Commission's (ECWMC) Watershed Management Plan Update. This is an exciting time for ECWMC as work begins on the 10-year update of the commission's Watershed Management Plan(s) (WMP). This process allows time to review and update past goals, strategies, and actions, and to think through watershed plans for the next ten years.

We understand the Commission has identified the following areas that will be specifically addressed during this planning process:

- Discuss approaches the Commission could consider addressing the impacts to water resources and infrastructure during the continued build-out of the watershed, changing precipitation patterns, incorporating a framework for mitigating those impacts and adding climate resiliency and sustainability.
- Incorporate summaries of the findings of the watershed-wide TMDL and review process and the subwatershed assessments and other studies completed since the Third Gen Plan was adopted, updating the Implementation Plan with actions to continue making progress.
- Identify and discuss options for enhancing education, outreach, and engagement in the watershed.

To aid this process, DNR has compiled this resource assessment letter to provide up-to-date information on DNR's priority issues for the watershed and useful data available through DNR that can help support watershed management organization planning, program management, and project development/design. The following narrative is divided into topics relevant to watershed resource management and included under each topic are DNR recommended actions. Continue to utilize information from State studies developed for the Watersheds including TMDLs and WRAPS to drive implementation programs and targeting.

Wes Saunders-Pearce, the DNR North Metro Area Hydrologist, will be participating on the Technical Advisory Committee for ECWMC Watershed Management Plan preparation process. If you have questions regarding the content of this letter or would like to discuss individual topics or recommendations further, please do not hesitate

to contact him (wes.saunders-pearce@state.mn.us; 651-259-5822). The DNR looks forward to working with ECWMC on your next generation Watershed Management Plan and on future public waters projects.

Sincerely,

Megan Moore
South District Manager – Ecological and Water Resources

cc: Jen Dullum, BWSR
Dan Lais, DNR
Jack Gleason, DNR
Dan Scollan, DNR
Abby Shea, MDH
Jeff Berg, MDA
Maureen Hoffman, Metropolitan Council
Jeff Risberg, MPCA
Katie Kowalczyk, MnDOT

General Watershed Management Strategies

DNR recommends that the following general watershed management strategies be a part of your watershed management plan (WMP):

- Keep water where it falls by protecting and restoring wetlands, ensuring water courses are connected to their floodplains, and managing stormwater runoff with rate control and volume reduction standards.
- Protect and create buffers of native perennial vegetation along watercourses and water bodies.
- Reduce the flow of water volume and nutrients through drainage systems.
- Design culverts and bridges to retain floodplain functions and bank stability on natural channels and other drainage systems.
- Support land use planning and practices that protect, restore, and enhance priority ecological resources.
- Maintain and enhance perennial vegetation including protection of working forest lands.
- Use water efficiently and implement conservation measures that further reduce water demand.

Integrated Water Resource Management

As the Elm Creek Watershed Management Commission begins the WMP update process, it's important that water resource issues and goals be addressed not as independent prescriptions, but as integrated activities strategically applied toward the improvement of the entire watershed system. DNR's Watershed Health Assessment Framework approach uses a five-component framework (hydrology, biology, connectivity, geomorphology, and water quality) to address the interdependent nature of ecological systems that operate within a watershed. Placing the goals and actions identified by the Committee into this framework may help to:

- Evaluate watershed goals and actions in the context of the five aspects of watershed health.
- Identify gaps between goals and actions.
- Prioritize chosen actions effectively.
- Examine the potential for unintended consequences.

Use the Watershed Health Assessment Framework interactive online map and downloadable data sets to help refine and organize the WMP within the context of a comprehensive watershed landscape.

Additional, specific recommendations by topical area follows:

Groundwater Sustainability

DNR continues to manage the state's groundwater resources to meet sustainability goals set out in Minnesota Statutes, section 103G.287. DNR recommends the ECWMC's WMP contain some key objectives and actions in the plan, including:

- Increase communication about the risks of overuse and degradation of groundwater resources and promote water conservation.
- Maintain and enhance aquifer recharge.
- Maintain and enhance quality of water recharging aquifers.
- Explore opportunities for stormwater and rainwater harvest and use to reduce reliance on groundwater.
- Increase coordination of monitoring activities between organizations with water management responsibilities, including monitoring water level trends using water level measurements from member communities.
- Increase coordination of communication activities between organizations with water management responsibilities.

Stormwater Management

The ECWMC's land use is a mix of rural areas and developed impervious surfaces. To reduce the resultant impact of increased runoff and pollutant loading to water bodies requires improvements to existing urban stormwater management infrastructure.

ECWMC plays an important role in urban stormwater management and DNR encourages the ECWMC to continue to work with its partners to:

- Monitor and protect the water quality of the ECWMC's water resources.
- Implement best management practices to reduce stormwater runoff.
- Investigate new stormwater management techniques.
- Promote green infrastructure such as rain gardens, permeable pavement, and swales.
- Address storm sewer infrastructure capacity and corresponding flooding problems.

One of the primary drivers of degraded water quality and habitat in rivers, streams, lakes and wetlands is nutrient and sediment-laden runoff from surrounding commercial, residential, and agricultural land uses. Minimum Impact Design Standards (MIDS) were developed by the Minnesota Pollution Control Agency to minimize stormwater runoff, minimize the amount of pollution reaching lakes, rivers, and streams, and to recharge groundwater. The development of MIDS is based on low impact development (LID), an approach to storm water management that mimics a site's natural hydrology as the landscape is developed. Continue to support the incorporation of MIDS (and the LID approach) into future development and redevelopment in the watershed.

Additionally, High Potential Zones for the federally endangered Rusty-patched Bumble Bee occur within the Elm Creek Water Management Commission. The Monarch Butterfly is also likely to be federally listed in the near future. Therefore, DNR encourages the use of BWSR-approved, weed-free, native seed mixes to the greatest degree possible in stormwater features and other landscaping in order to provide pollinator habitat, reduce runoff and erosion potential, and reduce the need for irrigation and fertilizer.

Septic Systems

Consider promoting homeowner education on the proper use and maintenance of septic systems to preserve their function. The University of Minnesota's Onsite Sewage Treatment Program designed a homeowner tool that allows users to create a custom guide for their septic system. The tool, known as H_2O&M, can be found at this website.

Chloride

Chloride released into local lakes and streams does not break down, and instead accumulates in the environment, potentially reaching levels that are toxic to aquatic wildlife and plants. Consider promoting local business and city applicator participation in the Smart Salting Training offered through the Minnesota Pollution Control Agency. More information and resources can be found at MPCA's Smart Salting training website. Many winter maintenance staff who have attended the Smart Salting training — both from cities and counties and from private companies — have used their knowledge to reduce salt use and save money for their organizations.

We encourage ECWMC to request that project proposers who wish to significantly increase impervious surfaces develop a chloride management plan that outlines what BMP's and strategies will be used to reduce chloride use within the project area. We also encourage cities, counties, and watershed districts to consider how they may participate in the Statewide Chloride Management Plan and provide public outreach to reduce the overuse of chloride. Please consider metrics in your plan that includes encouraging member communities to consider adopting an ordinance regarding chloride use using the MPCA's chloride reduction model ordinance MPCA's chloride reduction model ordinance.

Natural Shorelines

Since Minnesotans started developing around our lakes and rivers, our state has lost an estimated 40 – 50% of its natural shorelines. The loss of natural shorelines allows more naturally occurring phosphorus to flow directly into surface waters, increasing algae growth. An average suburban style lakeshore contributes seven to nine times more phosphorus per summer compared to a lot with a natural shoreline. This increase in phosphorus can result in the generation of 100 pounds of algae along the shore, compared to 15 pounds under natural shoreline conditions. On the other hand, natural shorelines help keep lakes clean for recreation and fishing. They stabilize shorelines, protecting property from wind and wave erosion, and they provide important wildlife habitat. Natural lakeshores also provide a place for relaxation and are central to Minnesota's identity as a good place to live.

We encourage ECWMC to invest in education for lakeshore property owners and provide opportunities for natural shoreline restoration and enhancement. DNR's Natural Shorelines webpage contains links to a number of helpful resources, including DNR's Score your Shore and Restore Your Shore tools.

Contact Wes Saunders-Pearce, North Metro Area Hydrologist (wes.saunders-pearce@state.mn.us; 651-259-5822) for public waters work permitting coordination on shoreline restoration projects.

Stream Bank Stabilization and Restoration

DNR's underlying philosophy regarding stream management is that streams are self-forming and self-maintaining systems. When they are artificially manipulated there can be negative impacts to channel stability. Alterations in pattern, dimension, or profile of a stream can lead to an increase in stream bank erosion, increased turbidity, embedded sediments, and a general reduction in biological productivity. DNR encourages the ECWMC to consider these stream dynamics when planning stream stabilization or restoration projects.

Before attempting to stabilize streambanks, understanding whether the underlying cause is systemic or localized is needed. If localized, then traditional stabilization techniques can be employed. DNR highly recommends using wood for toe stabilization given its habitat value. Toe-wood sod mats have been installed successfully on other rivers within the state to stabilize stream banks, protect infrastructure and provide habitat. DNR can provide site specific guidance if there is interest. If the underlying cause is systemic (e.g., altered hydrology), then additional assessment work is needed and streambank stabilization may not be appropriate for all sites due to the increased likelihood of project failure.

For more information and coordination on streambank stabilization and restoration, please contact Nick Proulx (nick.proulx@state.mn.us; 651-259-5850), DNR Clean Water Specialist.

Contact Wes Saunders-Pearce, North Metro Area Hydrologist (wes.saunders-pearce@state.mn.us; 651-259-5822) for public waters work permitting coordination on these projects.

Geomorphic Approach to Road-Stream Crossings

Poorly designed culvert and bridge openings and the encroachment of road fill into streams and their floodplains impact a watercourse's natural processes and ecological functions. DNR encourages communities to apply the Geomorphic Approach to Infrastructure Design at Road-Watercourse Intersections to foster natural system processes and establish stable watercourses through time.

A stable channel will effectively manage its water and sediment delivered with minimal changes through time. Past design methods for road-stream crossings focused on water conveyance alone; commonly concentrating all flow through the channel which can cause detrimental impacts to the stability of the natural watercourse. Applying the Geomorphic Approach can provide ecological benefits including long-term channel stability, ecological connectivity (e.g., fish passage), and floodplain connectivity.

For more information on this approach and grant funding opportunities, please contact DNR's Geomorphic Approach Team at Geomorphicapproach.dnr@state.mn.us and contact Wes Saunders-Pearce, North Metro Area Hydrologist (wes.saunders-pearce@state.mn.us; 651-259-5822).

Fisheries

Fisheries staff appreciate the ECWMC's previous and continuing work to improve water quality and fisheries resources. For more information and coordination on fisheries management projects, please contact Daryl Ellison (daryl.ellison@state.mn.us; 952-236-5171), West Metro Area Fisheries Supervisor.

Aquatic Invasive Species

Aquatic invasive species (AIS) pose a significant threat to Minnesota's lakes and rivers and continue to be a high priority issue for DNR. Aquatic invasive plants such as Eurasian watermilfoil and curly-leaf pondweed form thick vegetative mats on the water surface, limiting recreational opportunities and often negatively affecting water quality. Both the control of existing AIS and the prevention of new infestations are important efforts in terms of AIS management.

In most cases, eradication of invasive aquatic plants is not an option. Therefore, herbicide treatments are generally used to target abundant beds of invasive plants that may create a recreational nuisance. In most cases, the use of herbicides on lakes classified as Natural Environment (NE) lakes is not appropriate, and mechanical means (e.g., commercial aquatic plant harvester) may be a management option.

The establishment of both aquatic and terrestrial invasive species is a major threat to the ecological functions of both wetland and upland plant communities. Include plans to combat invasive species and best management practices (BMPs) in watershed project plans and designs. Promote education of the public on the control and spread of invasive species – public awareness efforts targeting riparian property owners (lakeshore owners) are needed to increase overall compliance with AIS laws. DNR will continue to support local efforts to educate the public in AIS prevention and encourage local units of government to take a leadership role.

To avoid the accidental spread of AIS during routine watershed activities, DNR recommends developing plans for work that involve visits to multiple lakes, such as water quality sampling. Plans should include 1) a thorough documentation of the presence of AIS in ECWMC lakes, including infestations like curly-leaf pondweed that may not be widely reported, 2) consideration of the order in which lakes are visited, and 3) decontamination procedures. Please contact April Londo (april.londo@state.mn.us; 651-259-5861) for information on AIS infestations in ECWMC lakes, and Christine Hokkala-Kuhns (christine.hokkala-kuhns@state.mn.us; 320-223-7845) for information on decontamination procedures.

For more information on the AIS Program, contact April Londo (april.londo@state.mn.us; 651-259-5861), invasive species specialist.

Conservation Partners Legacy Grant Program

The Conservation Partners Legacy (CPL) Grant Program funds conservation projects that restore, enhance, or protect forests, wetlands, prairies and habitat for fish, game, and wildlife. The types of projects funded under this grant program include prairie restoration, river restoration, lake habitat enhancement, wildlife habitat restoration, floodplain forest restoration, bluff prairie restoration, fish barrier installation, buckthorn removal, fish passage restoration, and others.

Participate in the Conservation Partners Legacy (CPL) Grant Program where possible. To learn more about this grant program, contact the CPL Grant Program coordinator (LSCPLGrants.DNR@state.mn.us; 651-259-5233).

Consideration of plant communities, rare species, and special features

Information on the biology, distribution, ecology, habitat use, conservation, and management of rare species of interest is available in the DNR's Rare Species Guide. The locations of state-listed species maintained in the Rare Features Database are considered sensitive information and is protected under the Minnesota Data Practices Act. This information is only available through a Natural Heritage Information System (NHIS) data request or by license agreement and should be used for internal planning purposes only.

Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of threatened or endangered species without a permit. Please note that the only way to screen a project for impacts to state-listed species that are protected by law is (1) to query the NHIS database by submitting a review request to Minnesota Conservation Explorer (MCE) or (2) to use a private NHIS license agreement to understand how the project may impact protected state-listed species and rare features. If rare features are identified within one mile of a project using a private license, the project should be submitted for review through MCE for further coordination with DNR. If protected species are identified within a mile, the project will be manually reviewed by Natural Heritage review staff who will follow up with next steps.

A Natural Heritage review is only considered current for 12 months because the NHIS database is continually updated as new information becomes available and will include current records and surveys. You can visit the online Minnesota Conservation Explorer tool to explore public data available for conservation planning, to request an automated Natural Heritage Review, and, for authorized users, to access nonpublic data.

DNR recommends using assessment data of watershed characteristics and natural resource features when completing long-range watershed planning efforts. The assessment of watershed characteristics and natural resource features is valuable for evaluating landscape functions and guiding land management decisions. These assessments provide important information on a landscape's integrity and its ability to provide benefits to ecosystems. For example, assessment data can be used to examine how projects will improve or affect flora and fauna, determine the cumulative impacts of land use, make regional scale land use decisions, and to balance land use development and natural resource protection.

The presence of rare species can be an indication of the health of a watershed, and plant and animal diversity help landscapes to maintain important watershed functions. DNR recommends that the ECWMC's WMP include goals and policies to address how rare species and habitat will be protected.

We encourage ECWMC to require an NHIS review as early in the planning stage of projects as possible in order to allow sufficient time for review and coordination with DNR. If the proposer waits until WCA TEP review to consider potential impacts to rare species, it is often late in the planning stages and could cause significant delays to the project.

DNR data layers have been developed that are helpful in watershed planning. These are free and available to the public from the Minnesota Geospatial Commons. Some key data layers include:

- DNR managed lands such as Scientific and Natural Areas, Wildlife Management Areas, and Aquatic Management Areas
- DNR native plant communities
- Karst features
- Minnesota Biological Survey (MBS) Sites of Biodiversity Significance
- Central Region Regionally Significant Ecological Areas (CRRSEA) – The purpose of this data is to inform regional scale land use decisions, especially as it relates to balancing development and natural resource protection.

- Regionally Significant Ecological Areas and Regional Ecological Corridors – Identifies potential habitat movement corridors that may be important for wildlife connections.

DNR encourages the use of site-appropriate native plants for shoreline stabilization, buffers, and erosion control for all watershed projects. These species provide important soil stabilization and erosion control functions, require less water and fertilizer, have the greatest chance of establishment success, and contribute to biodiversity of landscape vegetation. Query the DNR's Your Shore Native Plant Encyclopedia for a list of plants tailored to specific site characteristics. DNR recommends the establishment of native, deep-rooted grassland and herbaceous plant communities in the place of shallow-rooted, mowed turf grasses on watershed and highway projects as a means to support native insect pollinator communities and other wildlife. Interest in pollinators has grown since the term Colony Collapse Disorder appeared in 2006. This phrase refers to the puzzling disappearance of honey bees from their hives. While this disorder does not affect native pollinators, many of the challenges that face honey bees also affect native insects, including pesticide use, habitat loss, pathogens, parasites, climate change, and invasive species. DNR has developed a Best Management Practices Guide for restoring and enhancing native plant community habitat for native insect pollinators.

Forest Management Considerations

Importance of forested riparian areas to water resources cannot be understated. Forested riparian areas provide an array of goods and services for plant diversity, wildlife and fish habitat, nutrient, sediment, and water interception, storage, and transformation and recreational opportunities. Keeping riparian areas intact so that the functions and roles of terrestrial and aquatic ecosystems can continue to provide these services is imperative. We recommend keeping forested riparian areas forested, which does not necessarily preclude forest management activities. If riparian forests are managed in the ECWMC's area, we highly recommend consulting and using the Minnesota Forest Resource Council's *Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers, and Resource Managers* to protect these valuable ecosystems into the future.

Emerald ash borer (EAB) will continue to impact communities in the ECWMC area within the next 10-year watershed plan cycle. Communities should plan for EAB impacts and take action now to reduce the sudden financial burden that comes with EAB. More information is available from the University of Minnesota Extension website. The Minnesota Department of Health's interactive mapping website shows the status of EAB in Minnesota. The ECWMC area is within the "Generally Infested Area" and all of Washington County is within the quarantine area. To minimize pesticide exposure in the environment and to save people's money, we do not recommend applying insecticides to save ash trees until the symptoms of EAB infestation are within about ¼ - ½ mile of any given location. Ash trees can still be saved from EAB if they are lightly infested (they must still have over 50% of their normal number of leaves that are normally sized). Ideally, ash trees should be treated when they are 100% healthy and not infested at all, so there is some risk of waiting until EAB infestation symptoms are visible within a ½ mile. In natural areas, forested wetlands with ash dominant in the canopy will experience a more drastic change in plant community composition and hydrology than upland communities with a minor ash component.

The Forest Stewardship Program at the DNR provides private landowners with at least 20 acres of forested land (or land that will have trees) professional forest management advice from a qualified DNR forester or private land forestry consultant. For a fee, landowners will consult with a forester to talk about their goals for forest management. The forester will write a forest management plan and the land will be eligible for property tax relief programs and state cost-share assistance for management work. For more information on the DNR's professional forest management assistance for private landowners, please visit DNR's Forest Stewardship Program webpage.

Communities interested in caring for and managing their urban and community forests can find helpful information at DNR's Community Forestry webpage. The page includes information and links about grant

programs, DNR Arbor Month, and best management practices to prevent spreading invasive species and conserving wooded areas.

May 31, 2024

Judie Anderson, Administrator
Elm Creek Watershed Management Commission
3235 Fernbrook Lane N
Plymouth, MN 55447
763-553-1144
judie@jass.biz

Dear Ms. Anderson,

This letter is in response to your notification on March 29, 2023, soliciting input on the initiation of the Elm Creek Watershed Management Commission's (ECWMC) Fourth Generation Watershed Management Plan. Thank you for the opportunity to submit comments regarding water management issues and priorities for consideration in this planning process. Our agency looks forward to providing assistance to ECWMC and working together to achieve mutual goals.

The Minnesota Department of Health's (MDH) mission is to protect, maintain, and improve the health of all Minnesotans. An important aspect to protecting Minnesotans' health is the protection of drinking water sources. MDH is the agency responsible for implementing programs under the Safe Drinking Water Act.

Source Water Protection (SWP) is the framework MDH uses to protect drinking water sources. The broad goal of SWP in Minnesota is to protect and prevent contamination of public and private groundwater and surface water sources of drinking water using best management practices and local planning.

To aid in the development of ECWMC's new Plan, and to assist in working together toward addressing mutual goals and priorities, MDH SWP staff have compiled the enclosed recommendations and considerations on various priority issues related to source water and drinking water protection.

Within the recommendations and considerations, you will find various data, information, and resources to aid in the development and implementation of the Plan and associated projects. If you have any questions, or would like additional resources or technical assistance, please feel

free to contact me at (651) 201-4664 or dereck.richter@state.mn.us . Again, thank you for the opportunity to be involved in your watershed planning process.

Sincerely, Dereck Richter

Dereck Richter, Surface Water Program Coordinator
Minnesota Department of Health
Source Water Protection Unit
PO Box 64975
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Enclosures: MDH Priority Issues

CC: Mark Wettlaufer, MDH Source Water Protection Unit
Anneka Munsell, MDH Source Water Protection Unit
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Jeffrey Berg, MDA
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Jeff Risberg, MPCA

MDH Priority Issues

FOR THE ELM CREEK WATERSHED MANAGEMENT COMMISSION'S FOURTH GENERATION WATERSHED MANAGEMENT PLAN

Surface Water Source Water Protection

While all communities in the Elm Creek Watershed (Watershed) rely on groundwater as a source of drinking water, and will likely continue to into the future, the Watershed is upstream of the drinking water intakes for the Minneapolis and Saint Paul-Mississippi River public water systems. The entirety of the Watershed is within Priority Area B and a portion of Priority Area A of the surface water Drinking Water Supply Management Area (DWSMA-SW) for the Minneapolis and Saint Paul-Mississippi River public water supply systems. It is noted that the Priority Area A and B delineations will be revised in a future Source Water Assessment (SWA) to re-identify these areas as the Emergency Response Area (ERA) and Spill Management Area (SMA). In order to help protect this source of drinking water, the Minnesota Department of Health (MDH) recommends the following be considered for inclusion in the Watershed's Fourth Generation Watershed Management Plan (Plan) or other Watershed policy documents.

Land Use and Potential Contaminant Sources

Recommend local government units (LGUs) consider the impacts of future land use and zoning changes that could alter source water hydrology and, subsequently, water quality.

Consider recommending LGUs limit future pollutant-generating development activities within:

1) a 500-foot buffer of a stream or river that directly feeds into a source waterbody, 10 river miles upstream of either a lake outfall or the intake itself; and
2) a quarter mile (1320 feet) buffer around a lakeshore boundary that is designated as a source water.

Minneapolis sources their drinking water from the Mississippi River on the downstream end of the Watershed. For a list of all other source waterbodies, please contact MDH Drinking Water Protection.

At this time, an ERA and SMA for the Minneapolis and Saint Paul-Mississippi River public water systems have not been delineated and the Priority Area A is the smallest formally established protection area. The criteria listed above are what MDH uses to delineate the ERA and SMA, so we recommend it be used when evaluating future pollutant-generating development activities.

Examples of such pollutant-generating activities include, but are not limited to, facilities with aboveground and underground chemical storage tanks, feedlots, landfills, construction staging sites, and stormwater infiltration BMPs.

Consider recommending LGUs incorporate continuous potential contaminant source management at locations identified as high concern in the SWA for the Minneapolis and Saint Paul-Mississippi River public water supply systems once updated SWAs are published. The

updated SWAs will contain delineated ERAs and SMAs, as well as an inventory of potential contaminant sources for these areas. Examples of potential contaminant source management include, but are not limited to:

- Installing secondary containment measures around aboveground and underground storage tanks,
- Maintaining safe salt storage,
- Maintaining effective erosion control measures around construction sites, and
- Applying fertilizers and pesticides in accordance with the product manufacturer's directions.

In the meantime, consider recommending LGUs and other entities throughout the Watershed manage any potential contaminant sources they are already aware of within the existing Priority Area A for the Minneapolis and Saint Paul-Mississippi River public water supply systems.

To view surface water DWSMA-SW and Priority Area A/B information, visit MDH's online map viewer: Source Water Protection Web Map Viewer - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/water/swp/mapviewer.html).

The following webpage contains a link to this geospatial data file available for download: Reports and Geospatial Data Source Water Protection - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/water/swp/maps/index.htm#geospatial).

In the Plan, or in an education and outreach plan, include public outreach and education on contaminant source management strategies to protect surface waterbodies identified as a source water.

Source water educational resources are available here from the Minnesota Rural Water Association, in partnership with MDH: Source Water Educational Resources – Minnesota Rural Water Association (https://www.mrwa.com/swedu/).

Water Quality

MDH strongly recommends using mechanical methods to treat any water body connected to a public potable water supply. All other chemical treatment mitigation methods not listed above must be submitted to the Minnesota Department of Natural Resources and MDH for permit approval prior to application. Additional monitoring may be required by MDH during any chemical treatment application. Please contact MDH Drinking Water Protection for further assistance on this matter.

Groundwater Source Water Protection

Approximately five percent of the area of the Watershed overlaps with one or more groundwater Drinking Water Source Management Areas (DWSMAs), most of which are of low to moderate vulnerability. As population within the Watershed increases, municipal public water suppliers continue to require additional wells and water. These additional wells and water withdrawals could add to the size of the existing DWSMAs and/or change their vulnerabilities. Some communities without municipal water systems are considering establishing one. Additionally, there are many private drinking water wells throughout the Watershed.

Note DWSMAs in this section refer to groundwater DWSMAs. When considering DWSMAs, consider both municipal and non-municipal community public water supply systems. There is currently one delineated non-municipal DWSMA in the Watershed: Maple Hill Estates in Cocoran.

In order to help protect the aquifers supplying local drinking water, MDH recommends the following be considered for inclusion in the Plan or other Watershed policy documents.

Infiltration Considerations

Consider the following limits on infiltration to protect groundwater quality:

- Limit or prohibit infiltration within 100 feet of a public drinking water well.
- Limit or prohibit infiltration within 50 feet of any drinking water well.

Where the LGU is the project manager, consider recommending or encouraging the above limits on infiltration to protect groundwater quality.

To view groundwater DWSMA and vulnerability information, visit MDH's online map viewer: Source Water Protection Web Map Viewer - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/water/swp/mapviewer.html).

The following webpage contains a link to this geospatial data file available for download: Reports and Geospatial Data Source Water Protection - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/water/swp/maps/index.htm#geospatial).

Additional guidance on determining the suitability for infiltration within DWSMAs is available here: Stormwater and wellhead protection - Minnesota Stormwater Manual (https://stormwater.pca.state.mn.us/index.php/Stormwater_and_wellhead_protection).

The locations of many non-public drinking water wells can be found in the following database: Minnesota Well Index (MWI) - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/water/mwi/index.html). Please note that missing information does not guarantee there is not a well on a property.

Land Use and Potential Contaminant Sources

Recommend LGUs consider the impacts of future land use and zoning changes that could alter groundwater hydrology or introduce new potential contaminant sources in DWSMAs. MDH Source Water Protection staff can provide assistance with evaluating these changes either to the Watershed or to the LGUS directly.

Consider recommending LGUs limit future pollutant-generating development activities within highly and moderately vulnerable DWSMAs.

Examples of such pollutant-generating activities include, but are not limited to, facilities with aboveground and underground chemical storage tanks, feedlots, landfills, hazardous waste generating facilities, and stormwater infiltration BMPs.

Consider recommending LGUs and other entities throughout the Watershed incorporate continuous potential contaminant source management at locations identified in the potential contaminant source inventory for DWSMAs. LGUs should attempt to manage sources within their jurisdiction, regardless of whether the source is within their DWSMA or the DWSMA of a neighboring community. Examples of potential contaminant source management include, but are not limited to:

- Installing secondary containment measures around aboveground and underground storage tanks,
- Maintaining safe salt storage,
- Sealing unused wells, and
- Applying fertilizers and pesticides in accordance with the product manufacturer's directions.

Encourage LGUs to consult the Wellhead Protection Plans for the DWSMAs within their jurisdiction for specific examples and to work with neighboring communities to determine priority sources to manage and recommended BMPs.

Resources for managing potential sources of contamination are available at the following webpage: Resources for Source Water Protection Implementation Source Water Protection - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/water/swp/resources.html#contaminants).

Copies of Wellhead Protection Plans can be obtained by contacting the appropriate public water supply system or MDH Source Water Protection Staff, who will distribute the plans with the systems' permission.

In the Plan, or in an education and outreach plan, include public outreach and education on contaminant source management strategies to protect groundwater. Encourage and promote the sealing of unused wells.

Source water educational resources are available here from the Minnesota Rural Water Association, in partnership with MDH: Source Water Educational Resources – Minnesota Rural Water Association (https://www.mrwa.com/swedu/).

Well sealing information is available at the following MDH webpage: Sealing of Wells and Borings - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/water/wells/sealing/index.html).

Consider recommending the prohibition of alterations to the 100-year floodplain which would place wells within the floodplain.

Private wells

As mentioned above, there are many private drinking water wells throughout the Watershed. While many residents rely on these wells for the water they drink, no public entity is responsible for water testing or management of a private well after drilling is completed and before it is sealed. LGUs are best equipped to assist private landowners through land use management and ordinance development, which can have the greatest impact on protecting private wells.

Other suggested activities to protect private wells include hosting well testing or screening clinics, providing water testing kits, working with landowners to better manage nutrient loss, promoting household hazardous waste collection, managing stormwater runoff, managing septic systems, and providing best practices information to private wells owners.

Protecting private wells not only benefits private well owners, but everyone else who relies on drinking water from the same aquifer.

The Department of Natural Resources now hosts groundwater and drinking water information within the Watershed Health Assessment Framework | Minnesota DNR (https://www.dnr.state.mn.us/whaf/index.html). This framework provides an organized approach for understanding natural resource conditions and challenges. Utilizing the online map tool allows for the ability to make informed land management decisions that lead to groundwater protection. Specific layers that would be beneficial to protecting groundwater sources of drinking water include the following:

Pollution Sensitivity of Near-Surface Materials. This information can help with understanding the ease with which recharge and contaminants from the ground surface may be transmitted into the upper most aquifer on a watershed scale.

Primary Aquifers by Section. This data source displays the general distribution of aquifer use in the watershed, signaling where drinking water is at greatest risk to

contaminants from the ground surface. This information allows for targeting of projects to the sources of water people are drinking.

Drinking Water Wells per Section. This layer shows the density distribution of wells within the watershed by showing the number of known wells in each section. Only wells used for drinking water were included in the analysis to create this layer.

Geologic Sensitivity at Wells. This data source displays the geologic sensitivity at wells, as opposed to only at the surface. Well records from the Minnesota Well Index were used to create this layer. This information can help with understanding the ease with which contaminants can enter the aquifers and wells that watershed residents are obtaining their drinking water from.

Information on well water testing and drinking water quality for private well owners is available at the following webpage: Water Quality/Well Testing/Well Disinfection - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/water/wells/waterquality/index.html)

General Source Water Protection

In addition to actions specific to either surface water or groundwater, the following are general recommendations for broader source water and natural resource protection in the Watershed.

It is recommended to review MDH source water DWSMA maps when developing and implementing comprehensive watershed management plans, subwatershed plans, rule or policy changes, and other related documents and efforts.

MDH Source Water Protection staff are available for technical assistance as requested.

Consider implementation and promotion of Smart Salting initiatives to reduce chloride applications in the winter.

In the Plan, or in an education and outreach plan, include outreach and education on the importance of proper water softener maintenance as it relates to chloride contamination of surface water and groundwater resources.

Promote septic system maintenance to limit non-functioning septic systems. Work with LGUs to encourage connection to sanitary sewer where available, as well as proper abatement of unused septic systems.

Septic system maintenance resources are available from the Minnesota Pollution Control Agency and others at this webpage: Keep your septic system healthy | Minnesota Pollution Control Agency (https://www.pca.state.mn.us/news-and-stories/keep-your-septic-system-healthy).

On this webpage, there is an issue paper available on the potential impacts to drinking water from septic systems: Resources for Source Water Protection Implementation Source Water Protection - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/water/swp/resources.html#contaminants). Note that the issue paper is focused on impacts to wells and groundwater, but there are impacts to surface water sources of drinking water as well.

Consider assessing and addressing potential climate change impacts on source water and drinking water supply.

Funding Resources

MDH would like to make the Watershed aware of two funding opportunities for groundwater and drinking water (surface or groundwater source) projects: the Groundwater Protection Initiative Accelerated Implementation Grant and the Drinking Water Sub-Grant through the Clean Water Fund Projects & Practices Grant.

The purpose of the Groundwater Protection Initiative Accelerated Implementation Grant is to accelerate implementation of groundwater projects across the state. Funds can be used to conduct pre-project identification, planning, and design work that is required before on-the-ground projects can be implemented. For more information, visit the grant webpage: Accelerated Implementation Grant Groundwater Protection Initiative - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/water/groundwater/accimpgrant.html).

The Drinking Water Sub-Grant within the Projects & Practices program was established to support drinking water protection through land treatment projects that will protect or improve the quality of drinking water sources. This can be for a groundwater or surface water source of drinking water and is administered by the Board of Water and Soil Resources (BWSR). More information can be found on the project factsheet Drinking Water Sub-Grant Factsheet (PDF) (https://www.health.state.mn.us/communities/environment/water/docs/swp/bwsrgrant.pdf) as well as in the RFP on the BWSR grant webpage Grant Profile: Projects and Practices | MN Board of Water, Soil Resources (https://bwsr.state.mn.us/grant-profile-projects-and-practices).

DEPARTMENT OF AGRICULTURE

625 Robert Street North
Saint Paul, MN 55155-2538

May 31, 2024

Elm Creek Watershed Management Commission
Judie Anderson, Administrator
3235 Fernbrook Lane N
Plymouth, MN 55447

RE: Elm Creek Watershed Management Commission Fourth Generation Watershed Management Plan

Greetings Administrator Anderson,

This letter is in response to your March 29, 2024 letter soliciting input for the Fourth generation of the Elm Creek Watershed Management Commission's Watershed Management Plan. The Minnesota Department of Agriculture (MDA) maintains a variety of water quality programs including applied research, on-farm demonstrations, and groundwater and surface water monitoring. Our goal is to provide you with data from these programs to better characterize the watershed, identify key resource concerns and further engage the agricultural community at the local level. Below is a comprehensive list of MDA activities and resources for you to consider for possible inclusion in the plan update.

Groundwater protection:

Nitrogen Fertilizer Management Plan (NFMP)
http://www.mda.state.mn.us/nfmp
The NFMP is the state's blueprint for preventing or minimizing the impacts of nitrogen fertilizer on groundwater. The original plan was developed in 1990 and recently updated in March 2015. *There are various MDA activities that have been identified in the NFMP, that* may be applicable in this watershed.

Groundwater Protection Rule
https://www.mda.state.mn.us/nfr
The Groundwater Protection Rule (GPR) was developed by the MDA with significant stakeholder engagement over the past several years. The GPR minimizes potential sources of nitrate pollution to the state's groundwater and protects our drinking water. The rule restricts the application of nitrogen fertilizer in the fall and on frozen soils in areas vulnerable to contamination, and it outlines steps to reduce the severity of the problem in areas where nitrate in public water supply wells is already elevated.

Vulnerable Area map
https://mnag.maps.arcgis.com/apps/webappviewer/index.html?id=47a342afe6654640b935c8e76023da92
As a part of the GPR, the MDA has developed a vulnerable are map which illustrates the areas where the application of nitrogen fertilizer is prohibited on cropland in the fall and on frozen soils. There are vulnerable areas within the Elm Creek watershed, though much of it appears to be on non-cropland.

Conservation activities:

Minnesota Agricultural Water Quality Certification Program (MAWQCP)
http://www.mda.state.mn.us/awqcp.
The MAWQCP is a voluntary opportunity for farmers and agricultural landowners to take the lead in implementing conservation practices that protect our water. Those who implement and maintain approved farm management practices will be certified and in turn obtain regulatory certainty for a period of ten years. We encourage you to consider this program, because it is an opportunity for agricultural producers to evaluate on-farm nutrient, soil and water management practices to help address water quality within the watershed.

The AgBMP Loan Program
http://www.mda.state.mn.us/agbmploans
The AgBMP Loan Program is a water quality program that provides low interest loans to farmers, rural landowners, and agriculture supply businesses. The purpose is to encourage agricultural best management practices that prevent or reduce runoff from feedlots, farm fields, and other pollution problems identified by the county in local water plans. Loans can be used as match for other federal or state dollars supporting implementation.

Nutrient Management Initiative (NMI)
http://www.mda.state.mn.us/nmi
The NMI assists farmers and crop advisers in evaluating nutrient management practices on their own field through the use of on-farm trials. This is a great opportunity to promote new strategies that are available that could improve fertilizer use efficiency, evaluate new ideas or changes to practices, and help open the door to work directly on the farm by including local cooperators in the water quality discussion.

Agricultural irrigation management resources
New Cost-share Program to Help Upgrade Irrigation Systems | Minnesota Department of Agriculture (state.mn.us)
The MDA, in partnership with Soil and Water Conservation Districts (SWCDs) provides technical and financial resources for irrigation water management to promote proper water and nitrogen fertilizer management.

Irrigation Water Quality Protection
https://www.mda.state.mn.us/node/1313
The MDA provides Clean Water Funding to the University of Minnesota to hire an Extension Irrigation Specialist. This position is collaborating with public and private entities to develop and demonstrate tools and technology to protect and conserve groundwater resources.

Cropland Grazing Exchange (CGE)
Cropland Grazing Exchange | Minnesota Department of Agriculture (state.mn.us)
The Cropland Grazing Exchange (CGE) matches livestock farmers with crop farmers who have forage (crop residues, cover crops, etc.) to harvest. The Minnesota Department of Agriculture (MDA) partnered with the USDA Natural Resources Conservation Service and the Sustainable Farming Association of Minnesota to develop this tool.

Agricultural Land Preservation Program
https://www.mda.state.mn.us/environment-sustainability/farmland-protection
The MDA assists local government in protection of farmland through its Agricultural Land Preservation Program. This includes online tools and programmatic support.

Agricultural Growth, Research, and Innovation (AGRI) Program

The AGRI program has funding that may be helpful in water quality protection.:

- The AGRI Livestock Investment Grant encourages long-term industry development for Minnesota livestock farmers and ranchers by helping them improve, update, and modernize their livestock operation infrastructure and equipment. More information is available at www.mda.state.mn.us/livestockinvestment.
- The AGRI Sustainable Agriculture Demonstration Grant supports innovative on-farm research and demonstrations. It funds projects that explore sustainable agriculture practices and systems that could make farming more profitable, resource efficient, and personally satisfying. Findings are published in the MDA's annual *Greenbook*. More information is available at www.mda.state.mn.us/sustagdemogrant.

Monitoring and Assessment activities:

Pesticide Water Quality Monitoring

www.mda.state.mn.us/monitoring

The MDA has been conducting pesticide monitoring in groundwater since 1985, and in surface waters since 1991. The purpose of the MDA's pesticide monitoring program is to determine the presence and concentration of pesticides in Minnesota waters, and present long-term trend analysis.

Private Well Pesticide Sampling (PWPS)

Private Well Pesticide Sampling Project | Minnesota Department of Agriculture (state.mn.us).

The MDA is sampling and evaluating pesticide presence and magnitude in private residential drinking water wells as part of the PWPS.

Nitrogen and Pesticide Use

https://www.mda.state.mn.us/pesticide-and-fertilizer-use-surveys

The MDA surveys farmers' pesticide and fertilizer use through the National Agricultural Statistics Service (NASS).

Climate:

Minnesota's Climate Action Framework (state.mn.us)

The State of Minnesota has developed a Climate Action Framework which sets a vision for how we will address and prepare for climate change. It identifies actions to achieve our long-term goal of a carbon-neutral, resilient, and equitable future for Minnesota. Chapters 2 and 3 addressing natural and working lands, and community resiliency may be the most relevant to review for ideas for the next generation Elm Creek watershed plan.

Thank you for the opportunity to provide MDA information for consideration in the development of the next generation Elm Creek Watershed Management Commission Watershed Management Plan. Feel free to contact me if you have questions or would like more information on any of the above MDA programs and activities.

Sincerely,

Jeff Berg
Water Policy Specialist
Minnesota Department of Agriculture