MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

Meeting: Board of Managers
Meeting Date: 2/26/2026
Agenda Item #: 9.1
Item Type: Public Hearing

Title:	Initial Planning Meeting for 2027 Watershed Management Plan
Prepared by:	Name: Becky Christopher and Kate Moran Phone: 952-641-4512 bchristopher@minnehahacreek.org

Purpose
At the February 26, 2026 Minnehaha Creek Watershed District (MCWD) Board meeting, staff will provide an overview of information submitted by plan review agencies and local partners for consideration as MCWD develops its 2027 Watershed Management Plan (Plan), as required per MN Rules Chapter 8410.

Background
On January 27, 2026, MCWD hosted a kickoff event to initiate stakeholder engagement for its 2027 Plan. The event was well attended and provided an overview of the Plan scope and engagement process and opportunities for attendees to provide input and sign up to participate.

In addition to this kickoff event, there are requirements in Minnesota Rules Chapter 8410 outlining steps a watershed district must take to initiate early coordination with plan review agencies and local partners when developing a ten-year Plan. To meet these requirements, as part of the invitation to the kickoff event, staff requested the following information and allowed 60 days for input:

- From Plan Review Agencies: priority issues, management expectations, and relevant water resource information
- From Counties, Cities, Townships, and other known stakeholders: local water related issues, water management goals, official controls, and programs

The rules also require MCWD to hold a public meeting, presided over by the Board of Managers, to review and discuss the input received. The February 26, 2026 Board meeting will serve as this Initial Planning Meeting, and notice was sent to the appropriate parties and posted on MCWD's website.

Summary
During the 60-day input period, MCWD received responses from four Plan Review Agencies and four local city and county partners. The information submitted provides a preview of what the various agencies and local partners will be looking for from MCWD's 2027 Plan. These goals and priorities will be taken into consideration as MCWD works to develop its Plan over the next two years.

The summary below provides a high level overview of comments from each organization, followed by staff's key takeaways and thoughts on how the information will inform the plan development and engagement process. Attachment 1 provides all input received.

<u>Plan Review Agency Input</u>
Board of Water and Soil Resources (BWSR)
BWSR focused on measurable goals, targeted implementation, and plan clarity. Key input included:

- Establishing specific, quantifiable 10-year goals tied to priority issues.
- Clearly prioritizing implementation actions with schedule, cost, funding sources, and partner roles.
- Structuring the Plan to link assessment, goals, implementation, and budget in a concise and useable format.

Minnesota Department of Health (MDH)
MDH emphasized drinking water and groundwater protection within vulnerable areas. Key input included:

- Recognizing Drinking Water Supply Management Areas (DWSMAs) and applying infiltration limitations and engineering review in vulnerable areas and near public wells.
- Coordinating with local Wellhead Protection Plans and multi-community source water protection efforts.
- Advancing chloride source reduction, septic system education, and contaminant source management to protect groundwater quality.

Minnesota Department of Natural Resources (DNR)
DNR emphasized an integrated water resource management approach and reinforced MCWD's role in urban stormwater management. Key input included:

- Organizing goals and actions around integrated watershed health (i.e., hydrology, biology, connectivity, geomorphology, and water quality).
- Recognizing MCWD's important role in urban stormwater management, including water quality monitoring, best management practices implementation, green infrastructure advancement, and coordination to address storm sewer capacity and flooding challenges with partners.
- Supporting groundwater sustainability through aquifer recharge, water conservation, and coordination of monitoring and communication activities.

Minnesota Pollution Control Agency (MPCA)
MPCA emphasized establishment of priority areas and measurable goals and focus on addressing water quality impairments . Key input included:

- Implementing existing TMDL report recommendations and quantifying reductions over the 10-year plan cycle.
- Resources to support nutrient reduction, chloride reduction, groundwater protection, environmental justice, and community resilience.
- Incorporating climate data and changing precipitation patterns into infrastructure and resource planning.

<u>Local Partner Input</u>
City of Edina
Edina shared its local water plan and Clean Water Strategy. Key content included:

- Identifying nutrients, sediment, and chloride as primary pollutants of concerns.
- A structured waterbody prioritization framework that integrates impairment status, ecological health, public use, and equity considerations.

City of Long Lake
Long Lake expressed interest in continued collaboration to improve water quality within the Long Lake subwatershed.

City of Richfield
Richfield emphasized urban water quality pressures and infrastructure constraints. Key content included:

- Addressing shallow lake nutrient and chloride challenges, localized flood risk areas, and emerging contaminants.
- Recognizing groundwater vulnerability constraints limiting infiltration.
- Advancing local implementation through monitoring, modeling, pond rehabilitation, street sweeping, MS4 compliance, and climate action planning.

Hennepin County
Hennepin County highlighted opportunities to align watershed goals with county climate and natural resource initiatives. Key input included:

- Opportunities to align MCWD's goals and strategies with the County's Climate Action Plan and Natural Resources Strategic Plan.

- Leveraging county facilities, roadway projects, grants, conservation, and habitat programs for coordinated implementation.
- Continuing collaboration in shared priority subwatersheds.

Key Takeaways

From the input received, staff has identified the following as key takeaways that will inform the planning and engagement process:

Support for MCWD's Top Priorities

Agency and local partner input reinforces the District's focus on nutrient reduction and flood management as the priority water resource issues for the 2027 Plan. Commenters emphasized the need for continued focus on stormwater management, addressing impaired waters, and planning for a changing climate and increased flood risk. The Plan's focus on developing a regional flood management strategy will support the development of projects and policies that achieve both water quality and flood management goals as well as broader ecological and community benefits.

Need to Define MCWD's Role for Certain Issues

Several commenters identified other priority issues such as chloride management and groundwater protection where MCWD has less control and has played a less prominent role. In these areas, it will be important for MCWD to consider and define its role within the governance framework, as it has done for other issues such as AIS management, and speak to this in the Plan.

Emphasis on Setting Priorities and Measurable Goals

The plan review agencies commented on the need to establish clear priorities and measurable goals for the ten-year period. Establishment of an evaluation framework is one of the four work areas defined in the 2027 Plan scope. In addition to MCWD's approach of establishing priorities through the selection of focal geographies, the 2027 Plan will include an evaluation framework that connects MCWD's strategic goals to measurable ten-year goals to metrics that will be used to track progress.

Need for Local Context and Tailored Strategies

Comments from local partners reinforced the range of partner priorities and capabilities and the importance of understanding local context. The engagement process has been designed to support the development of tailored strategies by geography through subwatershed discussions.

Supporting documents:

Attachment 1: Minnesota Rule 8410 Input Received

BOARD OF WATER AND SOIL RESOURCES

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

February 11, 2026

Becky Christopher, Director of Policy Planning
Minnehaha Creek Watershed District
15320 Minnetonka Boulevard
Minnetonka, Minnesota 55345

RE: Minnehaha Creek Watershed District Watershed Management Plan Update

Dear Becky Christopher,

This letter is in response to the December 15, 2025, request for input for the next iteration of Minnehaha Creek Watershed District (MCWD) Watershed Management Plan (Plan).

Thank you for the opportunity to provide preliminary input. I appreciated meeting this past December discussing where you've been and where you hope to go during this planning process and update. Through the implementation of your previous Plan the MCWD has created a solid foundation from which to launch the next 10-year Plan. I look forward to working with you on your Plan update.

The Board of Water and Soil Resources (BWSR) has expectations for the Plan update that focus 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 and Minnesota Statute 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*:

- *Identifying and Prioritizing Resources and Issues* (pages 7-10)

- *Setting Measurable Goals* (updated chapter supports metro planning)
- *Targeting Implementation Activities* (pages 23-26)

The updated Setting Measurable Goals chapter supports both MN Rule 8410.0080 and One Watershed, One Plan content requirements while the other resources listed above 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.

Below are a few specific comments to consider as you begin the planning process.

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

- The Plan must include specific and measurable 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.
- BWSR encourages the MCWD to develop quantifiable goals and associated actions to achieve them. Quantifiable goals could include pollution reductions, educational events, assessments, studies, or model ordinances, to name a few.
- Developing clear and quantifiable goals also provides an excellent opportunity for the MCWD to highlight progress on protecting and restoring resources that are important to residents. This can help build local support for ongoing watershed work and foster increased community capacity and buy-in.

Implementation Actions (*please refer to MN Rule 8410.0105*):

- BWSR recommends the Plan be written to ensure that highly prioritized projects are targeted, making it easier to show how the MCWD 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.
- Minnesota Rule 8410.0105 Subpart 1. Item A. states that plans need to include a table that briefly describes each component of the required implementation actions (subparts 2-6), the schedule, estimated cost, and funding sources, including annual budget totals.
- BWSR recommends that the implementation section of the Plan clearly identifies a range of activities and programs that the MCWD, either as a lead or supporting entity, may want to pursue within the next 10 years. A table (or tables) will provide an essential and easy-to-interpret summary of prioritized activities and resources, partners, timelines, budgets, and (ideally) associated measurable goals, among other information.
- BWSR's Watershed-Based Implementation Funding requires that activities are identified in the *implementation section* of a state-approved, locally adopted watershed management plan under Minnesota Statue §103B.231 to be eligible. A comprehensive implementation table (or tables) can help both the MCWD and its partners easily identify eligible projects/programs and recognize when Plan amendments may be needed to incorporate new projects for funding.

Other comments:

- Board Conservationists are often asked what makes a "good" plan. In general, "good" plans are those that are fundamentally useful to the organization, and the most successful plans are concise, easy to follow, and help the organization achieve its goals. "Good" plans clearly describe:
    - current conditions (assessment),
    - desired conditions (measurable goals),
    - actions being considered to produce change (prioritization and implementation),
    - and how the activities will be paid for (budget).
- Similarly, BWSR encourages the MCWD to consider how they can best utilize the Plan's Executive Summary. For example, an "elevator speech" approach can make important Plan information accessible to a broad constituency while also providing a concise summary of issues, main goals, and major actions. Utilizing an array of graphics and/or bulleted lists can clearly illustrate main points and still meet plan content requirements.
- It will be exciting to see how the MCWD will incorporate monitoring information into the planning process and Plan itself since the development of the Ecosystem Evaluation Program. Analysis and discussion of data trends must be included in the assessment and identification of priority issues, utilized in the resource inventory, and included in establishment of water quality and quantity goals.
- BWSR encourages prioritization of activities related to climate change and resiliency in the updated Plan, particularly with respect to increasingly volatile precipitation and warming temperature regimes. Be sure to include a discussion of any progress made in the last ten years, including recent efforts through the MCWDs Climate Action Framework. The BWSR Climate Resiliency Toolbox may be a useful resource. Another new resource is Minnesota CliMAT[1] from the University of Minnesota Climate Adaptation Partnership.
- Given that increasingly complex groundwater issues and greater public concern have emerged over the past 10 years, BWSR encourages the MCWD to thoughtfully consider how they can best address groundwater resource issues and related outreach while developing the Plan.
- Chloride pollution continues to be a growing concern. BWSR recommends utilizing the Twin Cities Metropolitan Area Chloride Management Plan and TMDL (MPCA) and the Regional Assessment of Chloride in Select Twin Cities Metro Stream (Met Council) in addressing chloride issues and priorities in the Plan.
- When drafting the Plan, consider the various MCWD audiences and strive to write the Plan with plain language principles in mind and ensure the Plan is Americans with Disabilities Act (ADA) compliant. Also, during the Plan and public input process BWSR encourages consideration of diversity, equity, and inclusion elements to ensure robust community engagement. Tools such as Understanding Environmental Justice in Minnesota and the American Community Survey may be helpful.
- Once a first draft of the Plan has been prepared, you are encouraged to submit it 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.

I would like to recognize the excellent work the MCWD has done in implementing the current Plan. I look forward to providing additional input as MCWD works through development of the Plan. Please forward a copy of the proposed public input process once it has been finalized and invite me to any workshops, public input events, and Technical Advisory Committee meetings. If you have questions or need additional information, feel free to contact me by phone at 651-308-6956 or email at jen.dullum@state.mn.us.

[1] Minnesota CliMAT. University of Minnesota Climate Adaptation Partnership. Accessed 9/5/2024.

Sincerely,

Jennifer Dullum

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

- Reid Christianson, MDA
- Abby Shea, MDH
- Megan Moore, MnDNR
- Katie Kowalczyk, MnDOT
- Maureen Hoffman, Metropolitan Council
- Melinda Neville, MPCA

DEPARTMENT OF HEALTH

Protecting, Maintaining and Improving the Health of All Minnesotans

February 3, 2026

Becky Christopher, Director of Policy Planning
Minnehaha Creek Watershed District
15320 Minnetonka Blvd
Minnetonka, MN 55345
bchristopher@minnehahacreek.org

Dear Becky Christopher,

This letter is in response to your notification soliciting input on the initiation of the Minnehaha Creek Watershed District's (MCWD) Watershed Management Plan (Plan) update. 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 the MCWD 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.

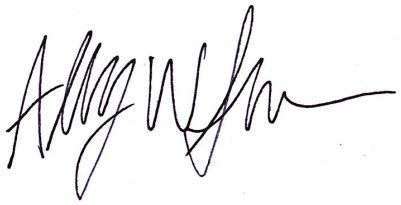
Source Water Protection (SWP) is the framework MDH uses to protect drinking water sources. The broad goal of SWP in Minnesota is to protect and prevent contamination of groundwater and surface water sources of drinking water using best management practices and local planning.

To aid in the development of MCWD's Plan update, 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) 201-4386 or abby.shea@state.mn.us. Should you choose to invite

MDH to any technical advisory or planning meetings, please note me as the contact. Again, thank you for the opportunity to be involved in your watershed planning process.

Sincerely,



Abby Shea, Principal Planner
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Enclosures: MDH Priority Issues

CC: Steve Robertson, MDH Source Water Protection Unit
Anneka Munsell, MDH Source Water Protection Unit
Jen Dullum, BWSR
Reid Christianson, MDA
Megan Moore, DNR
Katie Kowalczyk, DOT
Water Resources Planning, Metropolitan Council
Melinda Neville, MPCA

MDH Priority Issues

FOR THE MINNEHAHA CREEK WATERSHED DISTRICT'S WATERSHED MANAGEMENT PLAN

Groundwater Source Water Protection

A significant portion, currently approximately one-half, of the area of the Minnehaha Creek Watershed District (Watershed) overlaps with one or more groundwater Drinking Water Supply Management Areas (DWSMA), most of which is of low or moderate vulnerability to contamination. In total, there are 25 active DWSMAs in the Watershed. Additionally, there are private drinking water wells throughout the Watershed, particularly in the western portion of the Watershed.

As population within the Watershed increases, municipal public water suppliers continue to require additional wells. These additional wells could add to the size of the existing DWSMAs and/or change their vulnerabilities. This challenge increases the need to protect the usable high-quality groundwater within the Watershed.

Additionally, a significant portion of the DWSMA area within the Watershed is the newly approved West Metro Multi-Community DWSMA. This is a joint DWSMA for the communities of Bloomington, Chanhassen, Eden Prairie, Edina, Hopkins, Minnetonka, Richfield, and St. Louis Park. Consider participating in the remainder of the Wellhead Protection planning process for this multi-community project, as well as future Wellhead Protection planning and implementation processes, when contacted.

In order to help protect the aquifers supplying local drinking water, the Minnesota Department of Health (MDH) recommends the following be considered for inclusion in the Watershed's Watershed Management Plan (Plan) or other Watershed policy documents.

Infiltration Considerations

When evaluating infiltration best management practices (BMPs), it is important to not only consider groundwater recharge and surface water benefits, but potential impacts to groundwater quality as well. Consider the following limits without a higher level of engineering review on infiltration to protect groundwater quality:

- Consider requiring construction stormwater permit standards even when a Minnesota Pollution Control Agency (MPCA) Construction Stormwater Permit is not required, including limiting infiltration in delineated Emergency Response Areas (ERAs) within highly vulnerable DWSMAs.
- Limit infiltration within transportation corridors in highly vulnerable DWSMAs (e.g., highly vulnerable areas along Interstate Highway 35W, US Highway 169, and State Highways 100, 121, and 62).
- 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.

The higher level of engineering review uses site specific data to evaluate the potential impact of infiltration to drinking water. In these sensitive areas we suggest additional information regarding the infiltration water quality as well as the natural geologic protection at the specific site. This helps to protect drinking water quality. MDH staff are available to assist when determining suitability of projects in DWSMAs.

There are areas of significant groundwater contamination within the Watershed, particularly in the area near the intersection of State Highways 100 and 7. Infiltration BMPs may contribute to the movement of plumes. Locations in or near groundwater areas of concern may benefit from early consultation with MDH or MPCA staff.

To view 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 links to these geospatial data files available for download and the Source Water Protection Data Request Form: 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 data files for ERAs within DWSMAs are not available online. For this information, please contact the appropriate public water supply system or submit a request through the Source Water Protection Data Request Form. MDH Source Water Protection staff can assist with data requests.

Note that these resources should be checked periodically as the data is used by the Watershed, as DWSMAs are typically updated every 10 years, but sometimes more or less frequently.

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/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.

To view groundwater areas of concern, visit MPCA's Groundwater Contamination Atlas online map viewer: Minnesota Groundwater Contamination Atlas (https://webapp.pca.state.mn.us/cleanup/search).

The following webpage contains links to the Groundwater Contamination Atlas geospatial data files available for download: Minnesota Groundwater Contamination Atlas - Resources - Minnesota Geospatial Commons (https://gisdata.mn.gov/dataset/env-mn-gw-contamination-atlas).

Karst Prone Areas

The eastern part of the Watershed near the Mississippi River valley contains karst prone areas due to shallow bedrock. Water moving through shallow bedrock exploits pre-existing cracks, or fractures. In carbonate rock (like limestone or dolomite), this water chemically dissolves the rock along these fractures, potentially turning them into larger, interconnected networks. This solution enhancement increases the rock's ability to hold and move water, creating highly conductive pathways that quickly deliver water from the surface into the aquifer.

Care should be taken with stormwater management in these areas. Water management practices should include an evaluation of nearby known or suspected karst features and the impact they may have on the installation of BMPs, as well as the BMP installations' impact on groundwater quality.

Maps, geospatial data, and other technical resources for protecting groundwater in areas with karst features are available here from the MPCA: Resources for protecting waters in karst regions | Minnesota Pollution Control Agency (https://www.pca.state.mn.us/business-with-us/resources-for-protecting-waters-in-karst-regions).

The Minnesota Department of Agriculture and various partners, including MDH, have compiled educational resources relating to karst and groundwater quality. While these are specific to southeast Minnesota, they can be used to understand the impacts karst features have on water resources more generally. These resources are available here: Southeast Minnesota Groundwater Resources | Minnesota Department of Agriculture (https://www.mda.state.mn.us/segwresources).

Land Use and Potential Contaminant Sources

Recommend local government units (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 as included in the various associated Wellhead Protection Plans. 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 and systems 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 prohibiting alterations to the landscape which would place wells within flood prone areas. When discussing infrastructure related to potential flooding impacts, it is recommended to include drinking water wells in the infrastructure definition. MDH Source Water Protection staff are available to assess potential impacts of flooding on wells, groundwater, and public health.

A tool to assist in determining what areas may be prone to localized flood risk during short-term, extreme rain events is the Metropolitan Council's Localized Flood Map Screening Tool. This tool can be accessed here: Localized Flood Map Screening Tool (https://metrocouncil.maps.arcgis.com/apps/webappviewer/index.html?id=100fa3012dcc4e288a74cbf4d95027bf).

Private Wells

As mentioned above, there are private drinking water wells throughout the Watershed, particularly in the western portion of 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) in the WHAF: Explorer application. 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).

Surface Water Source Water Protection

While no portion of the Watershed is within a delineated drinking water supply management area – surface water (DWSMA-SW) for a public water supply system utilizing surface water*, there are still some considerations to keep in mind regarding surface water source water protection. There are eight surface water contribution areas, all a part of the West Metro Multi-Community DWSMA, that overlap with the Watershed boundary. This means that surface water run-off from these areas drains to an area of high groundwater vulnerability and could rapidly move into the aquifers that supply the cities' wells.

Therefore, there is opportunity for multiple benefit projects that improve stormwater and other surface water quality, as well as groundwater and drinking water quality. MDH staff can assist with evaluating BMP impacts on groundwater and drinking water within surface water contribution areas.

In order to help these surface waters, MDH recommends the following be considered for inclusion in the Plan or other Watershed policy documents.

Land Use and Potential Contaminant Sources

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

Encourage non-point potential contaminant source management by LGUs and other entities and individuals throughout the Watershed. Examples of this include, but are not limited to:

- 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 Plan, or in an education and outreach plan, include public outreach and education on non-point potential contaminant source management strategies to prevent negative impacts to surface water contributing to drinking water sources.

The easiest way to access surface water contribution area information is to contact MDH Source Water Protection staff who can provide maps, data files, etc. as relevant to the Watershed's needs or interests. Staff are also available to explain these areas and recommended actions in further detail.

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/).

*A Note About Priority Area B

A small portion of the Watershed is currently within Priority Area B of the DWSMA-SWs for the Minneapolis and Saint Paul-Mississippi River public water supply systems. However, the Priority Area A and B delineations are currently being revised in updated Source Water Assessments (SWAs) for both systems. The updated delineations will have ERAs and Spill Management Areas (SMAs) inside of the broader DWSMA-SWs, instead of Priority Area A and B. Near-final drafts of these SWAs indicate that the updated DWSMA-SWs will no longer extend into the Watershed. Therefore, this document states that no portion of the Watershed is within a delineated DWSMA-SW for a public water supply system utilizing surface water.

General Source Water Protection

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

It is recommended to have the Minnesota Geological Survey (MGS) review any geology-related sections of the Plan for accuracy, particularly in light of the newly updated Hennepin County Geologic Atlas.

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.

Continue 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.

If not already completed, consider if a study is necessary to determine chloride loading in the Watershed. Recent studies have been conducted elsewhere in the state, showing significant contributors beyond road salt.

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 MPCA 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).

Consider assessing and addressing potential climate change impacts on source water and drinking water supply. Recommend exploring how these impacts may fit into the Watershed's Climate Action Framework.

Overall, consider the potential for multiple benefits to be incorporated into the work the Watershed is already doing and planning.

Funding Resources

MDH would like to make the Watershed aware of two funding opportunities for groundwater and drinking water projects: the Groundwater Protection Initiative Accelerated Implementation Grant and the Drinking Water Sub-Grant through the Clean Water Fund Projects & Practices Grant. The next round of funding, as of the writing of this document, is planned for late winter-early spring 2026 for both opportunities. MDH Source Water Protection staff are available to assist with applications for these and other similar grant programs.

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). Note that these documents are from the previous round of funding. Before applying in the future, please refer to the most current RFP for details.

DEPARTMENT OF NATURAL RESOURCES

Central Region Headquarters
1200 Warner Road
Saint Paul, MN 55106

February 10, 2026

James Wisker, Administrator
Minnehaha Creek Watershed District
15320 Minnetonka Blvd
Minnetonka, MN 55345

Re: Minnehaha Creek Watershed District's Watershed Management Plan Update

Dear James Wisker,

This letter is in response to your notification soliciting input on Minnehaha Creek Watershed District's (MCWD) Watershed Management Plan Update. This is an exciting time for MCWD as work begins on the 10-year update of the Watershed Management Plan (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. To aid in 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 district planning, program management, and project development/design. The letter is divided into topics relevant to watershed resource management, and included with each topic are DNR recommended actions. Please continue to utilize information from State studies, including TMDLs and WRAPS, to prioritize and target the MCWD's programs.

Ryan Toot is the North Metro Area Hydrologist for Hennepin and Anoka Counties. He has requested to participate in the Technical Advisory Committee working on the WMP update and will be your primary DNR contact for that 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 (ryan.toot@state.mn.us; 651-259-5822). The DNR looks forward to working with MCWD on your next generation Watershed Management Plan and on future public waters projects.

Sincerely,

Megan JC Moore

Megan Moore
South District Manager – Ecological and Water Resources

cc: Jen Dullum, BWSR
Dan Lais, DNR
Jack Gleason, DNR
Ryan Toot, 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 Minnehaha Creek Watershed District 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 MCWD'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 MCWD's land use ranges from undeveloped to agriculture and suburban and urban uses. To reduce the resultant impact of increased runoff and pollutant loading to water bodies requires improvements to existing urban stormwater management infrastructure, as well as ensuring new stormwater infrastructure that mitigates the effects of additional development.

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

- Monitor and protect the water quality of the MCWD'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 Minnehaha Creek Watershed District. The Monarch Butterfly may also be federally listed within the timeframe of the updated WMP. 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 hosts resources for septic system owners and professionals, and real estate agents.

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 MCWD 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 MCWD 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 Ryan Toot, DNR's North Metro Area Hydro (ryan.toot@state.mn.us) 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 MCWD 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 necessary. 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 Ryan Toot, DNR's North Metro Area Hydro (ryan.toot@state.mn.us) 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 Ryan Toot, DNR's North Metro Area Hydro (ryan.toot@state.mn.us) for public waters work permitting coordination on these projects.

Fisheries

Fisheries staff appreciate the MCWD'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 MCWD 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 MCWD lakes or for more information on the AIS Program, and Traci Eicholz (traci.eicholz@state.mn.us ; 651-392-3117) for information on decontamination procedures.

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 MCWD's WMP include goals and policies to address how rare species and habitat will be protected.

We encourage MCWD 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 Restore 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 MCWD'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 MCWD area during 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 Agriculture's interactive mapping website shows the status of EAB in Minnesota. The MCWD area is within the "Generally Infested Area" and within the formal quarantine area. DNR recommends continuing to treat high-value ash trees that have had continued treatment every 2-3 years. 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 that own at least 20 acres of land with at least 10 wooded acres of wooded land 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. Eligible landowners are strongly encouraged to select from a list of private consultants in their area. 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.

The Urban and Community Forestry program's goal is to sustain Minnesota's community programs and help them manage diverse and healthy urban tree canopies that are resilient against climate change. Communities interested in caring for and managing their urban and community forests can find helpful information at DNR's Urban and 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.

MINNESOTA POLLUTION CONTROL AGENCY

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

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

January 29, 2026

Becky Christopher
Director of Policy Planning
Minnehaha Creek Watershed District
15320 Minnetonka Blvd
Minnetonka, MN 55345

RE: Minnehaha Creek Watershed District Watershed Management Plan Priority Concerns Review Period

Dear Becky Christopher:

The Minnesota Pollution Control Agency (MPCA) appreciates the invitation to participate in your Minnehaha Creek Watershed District (MCWD) Watershed Management Plan (Plan) process. As you begin, we hope you will consider the following comments as our priority issues and concerns, and we look forward to discussing these further with you in the months ahead.

We recommend:

- Incorporating and implementing strategies and goals from completed total maximum daily load (TMDL) and Implementation reports.
- 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 and WRAPS reports.
    - There is a section halfway down that lists the Minnehaha Creek Watershed District TMDLs and Implementation Plans
    - Basin-wide projects are at the top of the page.

    - Mississippi River - Twin Cities Watershed: TMDL projects | Minnesota Pollution Control Agency

- Mississippi River – Twin Cities Watershed monitoring reports
    - Mississippi River - Twin Cities | Minnesota Pollution Control Agency
- There are several data summaries at MPCA Data Visualizations
    - Choose an area of interest under topic. Topics include Climate, Water, Air, and others.
    - Water specific summaries include long term stream trends, MN National Lake Assessment, and the water assessments data viewer.
- Point Source Phosphorus Mapping Tool: Provides summaries of annual phosphorus and nitrogen loads and flow volumes discharged from National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) permitted facilities since 2005.
    - Nutrient Loads and Volumes
    - The Nitrogen or Phosphorus link on the page will take you to the mapping tool.
- Minnesota Nutrient Reduction Strategy – Updated in 2025; Includes reduction strategies and a 5-year progress report. There are BMP summaries, reduction goals, and trend summaries.
    - Nutrient Reduction Strategy
- Minnesota Stormwater Manual
    - MN Stormwater Manual
    - A section of the manual is related to applying better site design and may be helpful if reviewing development ordinances.
        - Stormwater manual - Better site design
- MPCA funding options
    - MPCA Grants, loans, and contracts
    - MPCA Wastewater and stormwater financial assistance
    - Infrastructure Funds and Programs / Public Facilities Authority (mn.gov)
- Groundwater protections – Towards the bottom of the page there are reports on the groundwater condition and BMPs for groundwater protection.
    - MPCA groundwater monitoring

Chloride Reduction

The MCWD has nine 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 limited 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 including model ordinances, policies, and reports.
    - MPCA Statewide Chloride Resources
- The Chloride map has been updated. High risk areas are identified as waterbodies where samples with a concentration over 120mg/L have been collected.
    - Minnesota Chloride Management Plan
- The Smart Salting training can be found at: Chloride | Minnesota Pollution Control Agency
- There is a section of the MN Stormwater manual aimed at designing with winter salting in mind: Cold climate challenges in stormwater BMP engineering and design | Minnesota Stormwater Manual

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 MN
- MPCA and environmental justice

Climate Change

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

- Protecting and expanding wetland and infiltration areas.
- 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.

Resources:

- Climate adaptation resources
- Climate resilient communities

Climate data interactive tools:

- Workbook: Climate change and Minnesota's surface waters - Climate summaries including ice duration, Lake temperatures, and stream temperatures.
- Minnesota CliMAT - Climate Mapping and Analysis Tool (CMIP6) | University of Minnesota Climate Adaptation Partnership (umn.edu) – The University of Minnesota (UMN) tool. They will do trainings for folks that are interested in incorporating the tool into planning.
    - There are regional summaries: Regional climate summaries | UMN Climate Adaptation Partnership

Background information:

- There are 97 impairments identified on the 2024 EPA approved 303(d) impaired waters list (MPCA impaired waters) for MCWD.
    - 59 impairments have an approved TMDL.
    - 38 impairments do not have approved TMDL plans.
        - 22 for aquatic life, which includes dissolved oxygen, fish, invertebrates, and stream nutrients.
        - 8 for aquatic consumption, which includes mercury and PFOS in fish.
        - 8 for aquatic recreation, which includes *E. coli* and lake nutrients.
            - 2 of these impairments are in the process of TMDL development - Church Lake (10-0046) and South Lundsten Lake (10-0043-02).
- 4 lakes have been delisted for nutrients including Stone (10-0056), Tamarack (10-0010), Powderhorn (27-0014), and Brownie (27-0038).

Again, thank you for the opportunity to provide MPCA priority issues and concerns to the draft Plan. If we may be of further assistance, please contact me, Amy Timm, at 651-757-2632.

Sincerely,

Amy Timm

This document has been electronically signed.

Amy Timm
Environmental Specialist
Watershed Division

AT:jdf

From: Jessica Vanderwerff Wilson
To: Becky Christopher
Cc: Ross Bintner (rbintner@edinamn.gov)
Subject: FW: MCWD"s 2027 Plan Kickoff Event Follow-Up
Date: Monday, February 9, 2026 9:23:51 AM
Attachments: image020.png
image022.png
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image028.png
image029.png
image030.png
image034.png
image035.png
image036.png
20241122_CWS Phase II_Project Memo_FINAL.pdf

Becky,

In response to this prompt;

- **Community and Agency Partners:** Please provide information on your organization's local water-related issues, water management goals, official controls, and programs.

Edina's local water plan and appendix is linked here: https://www.edinamn.gov/1334/Water-Resources

Edina's Clean Water Strategy final memo is attached.

Jess

Jessica Vanderwerff Wilson, CFM, Water Resources Manager
She/Her
952-826-0445 | Fax 952-826-0392
7450 Metro Blvd. | Edina, MN 55439
jwilson@edinamn.gov | EdinaMN.gov

Share your thoughts and ideas with the City online! Visit www.BetterTogetherEdina.org.

From: Minnehaha Creek Watershed District (MCWD) <outreach@minnehahacreek.org>
Sent: Friday, February 6, 2026 3:45 PM
To: Jessica Vanderwerff Wilson <jwilson@edinamn.gov>
Subject: MCWD's 2027 Plan Kickoff Event Follow-Up

From: Amanda Nowezki
To: Becky Christopher
Subject: City of Long Lake Local Water Management Goals
Date: Wednesday, January 21, 2026 3:06:13 PM

Hello Becky,

Regarding the letter dated December 15, 2025, I am writing to provide an update on the current water management goals for Long Lake.

In addition to collaborating closely with the watershed district on future projects within the City of Long Lake, we intend to identify opportunities to improve the lake's current water quality.

I look forward to attending the kick-off event on January 27th!

Thank you,

Amanda Nowezki
City Administrator
City of Long Lake
Email / anowezki@longlakemn.gov
Ph / 952.473.6961 x3

From: Mattias Oddsson
To: Becky Christopher
Subject: MCWD Plan Updates - Local Water Management Information for Richfield
Date: Thursday, February 12, 2026 5:30:54 PM
Attachments: image001.png
image002.png

Hi Becky,

Following up on the letter received on 12/15/25 regarding MCWD's upcoming plan update, I'm writing to provide information on Richfield's local water related issues, goals, and programs. Here is a link to our current Surface Water Management Plan for reference: Richfield_SWMP_12102018_Final.pdf. Most of the summary below is pulled from our SWMP, but I've added a few in italics based on my own experience.

- Issues
    - Surface water quality

We face numerous interrelated challenges associated with maintaining surface water quality in an urban environment. The most significant pollutants we see in our monitoring are typically phosphorus and chloride. Our shallow lakes and ponds are often hypereutrophic, especially from midsummer through fall. Though there aren't any impaired waters within Richfield's municipal boundaries, we are party to several TMDLs, including Lake Nokomis (nutrients), and Taft Lake (chloride). Emerging contaminants in stormwater such as PFAS and 6PPD are also of concern.

    - Water quantity and (pluvial) flood risk

We've made some significant strides in addressing this, but our H&H modeling indicates there are still several areas at risk throughout Richfield. Within MCWD, this includes 3rd Avenue between 74th and 76th St, and the neighborhoods between Taft and Legion lake in Northeast Richfield.

    - Wetland conservation

Almost all of our wetlands are within City parks. The challenges we face are more about preserving the quality of these wetlands than the quantity. Invasive species, pollution from stormwater runoff, fragmentation, and sedimentation all threaten our remaining wetland areas. Apart from enforcing WCA requirements, we are working to control invasive species and restore native vegetation in all our parks.

    - Groundwater protection

This is a significant concern in Richfield, as our current Wellhead Protection Plan has large swathes of high-vulnerability areas where infiltration of stormwater isn't allowed without higher-level engineering review per state requirements.

    - Erosion and sediment control

This is listed in our current SWMP, though I would consider it less of an issue than the rest on this list. We have a robust erosion and sediment control ordinance that requires a SWPPP for any project disturbing more than 5000 sf, and are currently working on integrating this permitting process into our online permitting system. The main erosion control challenge I foresee is one of staff capacity, as we have several large-scale projects coming over the next few years.

    - *Climate change*

Climate change poses a major, escalating risk. The increased magnitude and frequency of extreme weather, both heavy rainfall and drought, is something we are already seeing the effects of, and this will only get worse in the coming decades. We

are taking steps to build this into our modeling and planning processes. Under our programs I've included our climate action plan, since it is intertwined with our water resources planning. Both emissions reduction and climate adaptation are high priorities for the City.

- Goals
    - Maintain and enhance surface water quality to meet applicable standards and preserve ecological functions.
    - Minimize the risk of flooding and associated negative impacts to public health, infrastructure, and the environment.
    - Protect and preserve the quantity and quality of groundwater resources.
    - Minimize erosion of soil into surface water systems and other negative environmental impacts of stormwater runoff.
    - Protect and preserve fish and wildlife habitat and shoreland integrity.
    - Preserve the quantity and quality of wetlands.
    - Minimize public expenditures related to surface water management through effective planning, education, cooperation, and implementation.
    - *Maintain robust and resilient water infrastructure.*

- Official Controls
    - City Code

Sections 427 – 430 (wetlands, erosion control, water resource management, sections 720-721 (storm sewer system), and section 550 of the zoning code (floodplains) are the primary regulatory mechanism for stormwater within Richfield.

    - MCWD MOU (2009)

Per this MOU, Richfield exercises regulatory authority over erosion control, floodplain alteration, wetland protection, and stormwater management within its boundaries, provided we pass local ordinances that are at least as stringent as MCWD rules.

    - Stormwater Design Standards

This document is maintained by public works and incorporated by reference into several ordinances. It contains detailed requirements for stormwater management and design standards for storm sewer and BMPs.

    - SWPPP/MS4 Program
    - *Wellhead Protection Plan*

Currently, we are working with several other West Metro cities on a combined, regional Wellhead Protection Plan. Part 1, which delineates the combined drinking water supply management area, is complete. Work is now focused on part 2, which will lay out actions to be taken to protect source water aquifers.

- Programs
    - Water quality monitoring

We conduct regular monitoring monthly during the growing season at all of our lakes and most of our City-owned stormwater ponds. This data helps guide our long-range planning and

    - Taft Floc stormwater treatment system

The Taft/Legion stormwater treatment system is something we've worked closely with MCWD on since its inception. Currently, Barr Engineering is finalizing a feasibility study – the culmination of a lot of data collection and modeling work - that looked at

various potential projects to improve the performance of the system or remove enough additional phosphorus to ensure that Taft Lake will continue to meet water quality standards.

- Stormwater pond rehab program

Since 2020, Richfield has been doing a major restoration of a City-owned pond roughly every other year. These projects generally involve dredging, restoration of a pond buffer and upland areas with native vegetation, and retrofit with additional BMPs where feasible and cost-effective. We've developed an internal pond prioritization plan using water quality data, inspection results, and modeling to select projects. It's likely an upcoming project will be within MCWD, and we will let you know as soon as possible once that is determined.

- Street sweeping

We do a lot of street sweeping! I believe it was 7 citywide sweeps last year and in 2024. Research shows that this is one of the most cost-effective methods of removing TSS and TP, by preventing it from getting to our waterbodies in the first place. In the future, I hope to develop a targeted street sweeping program so we can focus additional sweeping in areas where it is most needed, rather than always sweeping Citywide.

- Education and outreach

Our education and outreach program is intended to comply with MS4 requirements, but we do strive to exceed the minimum requirements of the permit.

- BMP inspection and maintenance

Public works completes annual inspections and maintenance on numerous BMPs, mostly sumps and underground chambers that need to be vacuumed out regularly, but also a few surface infiltration basins.

- Stormwater modeling

Our current SWMP, finalized in 2018, had several action items related to stormwater modeling, which have since been completed. We have a Citywide H&H model as well as GIS and P8 based storm water quality models. Last year we finalized updates to our H&H model along with a flood risk prioritization plan to target the most significant remaining areas of flooding in Richfield.

- *Climate Action Planning*

Adding this since it is closely tied to our water resource planning, and our climate-related work has advanced significantly in the last 10 years. Happy to provide a copy of the plan if that would be helpful. The water related sections of the CAP focus mostly on flood risk.

Please let me know if you need more information! Happy to share anything that would be helpful, and I look forward to collaborating as plan updates move forward.

Best,
Mattias Oddsson

Mattias Oddsson (He/Him)
Water Resources Engineer
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HENNEPIN COUNTY
MINNESOTA

February 6, 2026

Becky Christopher
Director of Policy Planning
Minnehaha Creek Watershed District
15320 Minnetonka Blvd, Minnetonka, MN 55345

RE: MCWD Watershed Management Plan Update

Dear Becky Christopher,

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 update of the Minnehaha Creek Watershed District's Watershed Management Plan (WMP). The County views MCWD as a critical partner in our shared work to improve water quality and enhance and protect natural and water resources throughout our area.

On December 15th, 2026, we received notice of your intent to update your WMP, 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 that directly align with the goals and objectives of your WMP.

Climate Action Plan
In accordance with Earth Day 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 MCWD, and to this WMP. Some of these are listed in **Table 1** below. These will also be reflected in the County's updated Natural Resources Strategic Plan.

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 to, climate change, as well as incorporate initiatives to reduce disparities. Several of the goals, actions, and metrics listed below will be incorporated into the strategic plan. Others from the current Natural Resources Strategic Plan are listed in **Table 2.**

Hennepin County Environment & Energy
300 South 6th St, MC 679, Minneapolis, MN 55487
www.hennepin.us/environment

Roadways and Facilities
Hennepin County owns and operates several facilities and a transportation system within the jurisdictional boundaries of the MCWD. 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 MCWD as a great opportunity 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 opportunities to do that in conjunction with our capital plan.

Natural Resource Grants
Hennepin County offers Natural Resources Grants for projects that improve water quality or enhance natural areas in the county. Over the years, private and public organizations have been successful in securing and implementing Natural Resource Grants for many projects within MCWD. Since 2017, 24 projects within MCWD have received funding through Hennepin County's Natural Resources Opportunity and Good Stewards Grant programs, including MCWD's Arden Park Restoration Project. In the most recent grant cycle, seven Natural Resources Grants were awarded to project sponsors within MCWD. These projects include construction of five raingardens, installation of a cistern and sustainability hub, stabilization of an eroding channel draining to Lake Minnetonka, and installation of native plantings that create native habitat and reduce stormwater runoff entering Lake Minnetonka and Minnehaha Creek. We hope to continue to 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 projects on their property. A good example of this is our efforts to implement conservation activities on public and private properties through our Cost Share for Conservation program. This program works with private and public landowners to address erosion and nutrient runoff to protect impaired waterbodies. The county has identified several priority subwatersheds and has been implementing projects through partnerships with the Elm Creek and Pioneer-Sarah Creek Watershed Management Commissions and the State of Minnesota through Clean Water Fund Grant funding for several years to address water quality (and most consistently nutrient impairment) concerns in lakes and streams across those subwatersheds. During conversations with the District in 2025, we explored adding Painter's Creek as a priority subwatershed in the future and would like to continue those conservations into 2026.

Aquatic Invasive Species Education and Grants
Hennepin County offers educational resources and grants to help prevent the spread of aquatic invasive species (AIS). Hennepin County offers AIS prevention grants, a Lake Pledge program, and additional outreach and education materials to support AIS prevention. Hennepin County values past partnerships with MCWD working to prevent the spread of AIS within the watershed, and we hope to continue partnering on this work in the future.

Habitat Protection
Hennpin County works with residents and partner organizations to protect and restore habitat through conservation easements and habitat restoration projects. Through a partnership with MN

Land Trust, the county has placed 862 acres in easement, 27% (232 acres) of which is in MCWD. Hennepin County also provides stewardship for Board of Water and Soil Resources (BWSR) easements including Reinvest in MN (RIM) and Permanent Wetland Preserve (PWP) easements across 198 acres in the county and 9 acres in MCWD. Additional information on our habitat restoration programming can be found on our website.

Additional Funding Sources
Beyond Natural Resource Grants and AIS Grants, Hennepin County has other opportunities to assist in planning and implementation, which includes grants for environmental education, 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. Amy Riegel (amy.riegel@hennepin.us; 612-348-6604) will be our appointed representative for these efforts. Please don't hesitate to reach out to Amy for any assistance she can provide.

Sincerely,

Amy Riegel
Senior Water Resources Specialist
612-348-6604 (office) | 612-849-2237 (mobile)
amy.riegel@hennepin.us

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

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 MCWD WMP.

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