

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE
3235 Fernbrook Lane • Plymouth, MN 55447
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www.elmcreekwatershed.org

February 5, 2025

Representatives

and

Technical Advisory Committee Members
Elm Creek Watershed Management Commission
Hennepin County, Minnesota

The meeting packet for this meeting may be found on the Commission's website:
<http://www.elmcreekwatershed.org/minutes-meeting-packets.html>

Dear Representatives and Members:

A regular meeting of the Elm Creek Watershed Management Commission will be held on **Wednesday, February 12, 2025, at 11:30 a.m.** at Plymouth Community Center, 14800 34th Avenue North, Plymouth, MN. We will meet in the **Aspen Room** on the main level.

The Technical Advisory Committee (TAC) will meet prior to the regular meeting, at 10:30 a.m.

Please email me at judie@jass.biz to confirm whether you or your Alternate will be attending the regular meeting.

Thank you.



Judie A. Anderson

Administrator

JAA:tim

Encls: Meeting Packet

| | | | | | |
|-----|--------------------|--------------|---------------|--------------------|-------------|
| cc: | Alternates | Erik Megow | Diane Spector | Rebecca Carlson | City Clerks |
| | TAC Members | Karen Galles | Kris Guentzel | Brian Vlach | |
| | DNR | BWSR | Met Council | MPCA | |
| | Reviewing Agencies | | | Official Newspaper | |

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CHAMPLIN - CORCORAN - DAYTON - MAPLE GROVE - MEDINA - PLYMOUTH - ROGERS

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AGENDA Technical Advisory Committee February 12, 2025 | 10:00 a.m.

1. Call to Order.
 - a. Approve agenda.*
 - b. Approve minutes of last meeting.*
2. Proposed 2025 Work Plan.*
3. Fourth Generation Plan.
 - a. Compensatory Storage – presentation.
 - b. Linear Project Sequencing.*
 - c. Monitoring Plan.*
 - d. Public Input Plan.*
 - e. Resilience Plan - presentation.
4. Other Business.
5. Next TAC meeting – _____.
6. Adjournment.

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*in meeting packet
**available at meeting

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Technical Advisory Committee Meeting Minutes | January 8, 2025

I. A meeting of the **Technical Advisory Committee (TAC)** of the Elm Creek Watershed Management Commission was called to order at 10:03 a.m., Wednesday, January 8, 2025, in the Plymouth Community Center, 14800 34th Avenue North, Plymouth, MN, by Vice Chair Ben Scharenbroich.

Present: Heather Nelson, Champlin; Lauren Letsche, Corcoran; Kent Torve, Dayton; Derek Asche, Maple Grove; Ben Scharenbroich, Plymouth; Andrew Simmons, Rogers; Kevin Ellis, Hennepin County Environment and Energy (HCEE); Brian Vlach, Three Rivers Park District (TRPD); Diane Spector and Erik Megow, Stantec; and Amy Juntunen, JASS.

Not represented: Medina.

Also present: Doug Baines, Dayton, and Talori Dunsworth, Plymouth.

II. The **AGENDA** was approved with the addition under item 5. Other Business of:

a. North Fork Rush Creek, development of base flood elevations.

Motion by Simmons, second by Nelson to approve the **minutes of the November 13, 2024, meeting.** *Motion carried unanimously.*

III. **PROPOSED 2025 WORK PLAN.***

A. Staff's January 2, 2025, memo* outlined highlights of the proposed **2025 Work Plan.** They include:

1. Complete development of the **Fourth Generation Watershed Management Plan**; the current Plan expires in Fall 2025.

2. The **Watershed-wide TMDL Ten Year Review** currently underway will be wrapped into the Fourth Generation Plan in the same manner as the original TMDL and WRAPS. Implementation strategies and actions from those studies were incorporated into the Third Generation Plan.

3. The **BWSR Watershed-Based Implementation Funding (WBIF) for FY25** (\$373,590) has been contracted and entities will start implementing improvements in 2025.

4. Continue to **partner with WMWA and Hennepin County on enhanced education and outreach**, with leadership and assistance from the shared outreach coordinator. The Commission will also sponsor one or more shoreline restoration/resilient yards workshops with the shared coordinator and Metro Blooms as part of the WBIF funding.

5. **Chloride management** is a priority topic, and the successful grant application to develop a chloride management plan jointly with the Shingle Creek and West Mississippi WMOs will fund a plan that clarifies the problem assessment, identifies the different stakeholders and their actions and messages, and includes goals and options for implementation. This work will begin in

Spring 2025 following execution of a contract with BWSR, expected by March.

6. Admin staff will update the **Commissioners' Handbook** and make it available on the website for ease in keeping it current.

B. Other segments of the proposed Work Plan focus on Special Studies and Projects, the Monitoring Program, Education and Outreach, Agricultural Outreach, and Routine and Administrative Actions.

Members noted that they would like to see the Commission's policies on the website, and that the website be reorganized and updated.

Vlach recommended changes to the 2024 monitoring program in review. Vlach will review the proposed 2025 lake monitoring program and return to the February meeting with his recommendations.

IV. FOURTH GENERATION PLAN – RULES AND STANDARDS.* Staff advised the members that this is the best time to make any revisions to the Commission's Rules and Standards. So far, no real changes have been proposed except that brought forth by the **City of Champlin.***

A. **Linear Projects.** The City of Champlin approached Elm Creek staff to discuss the stormwater management requirements for the reconstruction of city roads in a residential neighborhood within the Lemans Lake watershed. After discussing alternatives, outlined in their memo, attached, City and Commission staff wished to discuss the requirements and due diligence expected from cities for future residential road reconstruction projects.

The Commission's current stormwater requirements for linear projects sets forth certain volume control reduction standards and contains a provision that if those cannot be met cost-effectively, other minimum standards apply.

When that Rule language was considered, the TAC and Commission discussed but elected not to define what "cost-effectively" means. For the project alternatives outlined by Champlin, volume control for this project is feasible, but the cost is approximately \$15,000-\$30,000 per pound of phosphorus treated/removed. City staff believe this *cost per lb. TP removed* is not a cost-effective BMP for the City.

Staff believe that the Rules and the NPDES Construction and Stormwater permits require entities to 1) make a good faith effort to explore a range of potential BMPs that could meet wholly or partially the required load and volume reductions, 2) document those options and the entities' rationale for selecting or rejecting the proposed BMPs, and 3) document off-setting BMPs that the city is undertaking within the watershed. It would be helpful if the Rules could clarify and outline the sequencing requirements for linear requirements to further align with the MS4 requirements. **Staff recommend adding** language for linear projects similar to the Shingle Creek Rules

What the City of Champlin is proposing in their recommended alternative would meet the sequencing requirements by documenting the alternatives considered and eliminated and by at least maintaining rates and adding water quality BMPs within the right-of-way to reduce TSS and TP loads below the existing conditions.

B. Buffers. Staff noted that one other Rule that sometimes causes some discussion with applicants is the minimum buffer width requirement. Where the 10-foot minimum can't be met, there's usually wetland alteration/mitigation impacts. The Rules also do not specifically address retaining walls. Staff typically work with applicants to direct runoff for alternative treatment or otherwise minimize impacts to the wetland.

C. Compensatory storage for linear projects with floodplain impacts is an issue when roadway or redevelopment projects replace or widen channel crossings, requiring fill in the floodplain/floodway. Any time volume is reduced from floodplain, hydrology must be updated. Need to show *no rise and provide compensatory storage*, or go through the *CLOMR/LOMR* process. Without compensatory storage, DNR and FEMA will ask for hydrologic updates and likely will require the city to go through the CLOMR/LOMR process.

D. Discussion

In the Champlin scenario, Nelson is looking for feedback on how other members are handling this. Rules currently state, volume reduction practices are not required if they can't be provided cost-effectively. Commission does not define "cost effectiveness." At a minimum, project must provide BMPs that don't increase rates or TSS/TP loads (zero degradation).

Especially for city projects, realizing the cities are undertaking other water quality projects as well, those "other projects" should be taken into consideration. Be cautious when counting on the city's capital program as part of these linear projects. Don't want to construe that capital projects are offsetting linear projects or "trading."

[Asche arrived 10:26 a.m.]

Cities have rules and MS4 permits. TAC consensus is to leave flexibility up to cities to report. Want Commission to have flexibility to ask if the water quality could be offset elsewhere in the city. We do the same for private companies.

The Commission's Rules do not currently provide guidance on cities' determination of cost-effectiveness. Each city may have a different amount deemed cost-effective. Do we leave it to each city to make that determination? Ultimately it is between the MPCA and the City, and there hasn't been any guidance from the MPCA either. It was noted that the Minnesota Cities Stormwater Coalition (MCSCS) is working on this as well, and it would be worth touching base with that staff.

The proposed sequencing language could be added as a guidance or procedure, not a rule change. Note, that right now, Rules just say "maximize treatment." Adding the sequencing procedure gives reviewing team guidance in the submittal.

There was no clear consensus except that the minimum standard should be non-degradation. The TAC was interested in continuing the discussion at the February meeting. One option discussed was the Rules could just say something like "For MS4s, provide volume and water quality in accordance with NPDES permit requirements," then provide the sequencing guidance, with non-degradation being the minimum requirement.

Staff will provide draft proposed language for the next meeting.

V. WINTER SALT WEEK.*

The TAC reviewed information provided about the upcoming Winter Salt Week, January 27-31, 2025, a collaboration of governmental and non-governmental organizations across the United States and Canada with the goal of raising awareness around salt pollution and reduction solutions.

www.wintersaltweek.org has a rundown of the daily webinars including Minnesota speakers providing public works' perspectives and presenting on the policy solutions panel. The event consists of a series of online presentations over four days. The fifth and final day offers an opportunity for cities, watershed organizations, and others to hold their own events.

The Low Salt, No Salt MN team has developed a toolkit to help promote Winter Salt Week at [Winter Salt Week Toolkit](#).

Online Workshop for Community Leaders about Chloride Pollution. The MPCA is sponsoring a [Smart Salting: Community Leaders Workshop](#) on January 31, 2025, 11 am-1 pm..

Locally, [Plymouth](#) is hosting a Winter Maintenance Open House on January 30.

The **Joint Chloride Management Plan** that will be developed by the Shingle Creek, West Mississippi, and Elm Creek WMOs will incorporate Winter Salt Week into its education and outreach plan. WMWA, Hennepin County Chloride Initiative (HCCI) and Watershed Partners are working with the MPCA to develop Low Salt No Salt and Winter Salt Week into a cohesive, statewide campaign.

VI. OTHER BUSINESS.

A. North Fork Rush Creek.* The cities of Corcoran, Dayton and Maple Grove are all expecting development in this area, which is a FEMA A zone. Downstream of this area is at elevation 913, Zone AE. Upstream is at elevation 914, Base Flood Elevation (BFE). The latest HUC8 study shows elevations just below 910.


Cities are asking for guidance on the appropriate BFE. Models are not available showing the best available data. Existing effective models do not have best crossing data that the HUC8 study does. If FEMA corrects the model in the future resulting in homes being located in the floodplain, that would be not acceptable. But, by keeping the model conservative as it is currently, then some development may not be able to occur.

Motion by Scharenbroich, second by Simmons to recommend an expenditure of \$5,000 from general funds to update the modeling to come to a consensus on the best flood elevations using the most up to date information for this area. Motion carried unanimously.

B. The **next meeting** of the Technical Advisory Committee is scheduled for 10:30 on Wednesday, February 12, 2025.

There being no further business, the meeting was adjourned at 11:31 a.m.

Respectfully submitted,



Judie A. Anderson

for Amy Juntunen, Recording Secretary

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CHAMPLIN - CORCORAN - DAYTON - MAPLE GROVE - MEDINA - PLYMOUTH - ROGERS

To: Elm Creek WMO Commissioners/TAC

From: Erik Megow, PE
Diane Spector
Judie Anderson

Date: February 5, 2025

Subject: Final 2025 Work Plan

**Recommended
Commission Action**

Discuss and revise as desired and adopt.

Attached is the proposed work plan for 2025. Many of the items on this list are routine, but some are special projects or studies. The Commission and TAC preliminarily discussed in January. Aside from some revisions to the proposed monitoring program, no other revisions were requested. Highlights include:

- The major item on the proposed workplan is to complete development of the Fourth Generation Watershed Management Plan; the current Plan expires in Fall 2025.
- The Watershed -wide TMDL Ten Year Review currently underway will wrap into the Fourth Generation Plan in the same manner as the original TMDL and WRAPS. Implementation strategies and actions from those studies were incorporated into the Third Generation Plan.
- The BWSR Watershed-Based Implementation Funding (WBIF) for FY2024/25 for Elm Creek (\$373,590) has been contracted and entities will start implementing improvements in 2025.
- We will continue to partner with WMWA and Hennepin County on enhanced education and outreach, with leadership and assistance from the shared outreach coordinator. The Commission will also sponsor one or more shoreline restoration/resilient yards workshops with the shared coordinator and Metro Blooms as part of the WBIF funding.
- Chloride management is a priority topic, and the successful grant application to develop a chloride management plan jointly with the Shingle Creek and West Mississippi WMOs will fund a plan that clarifies the problem assessment, identifies the different stakeholders and their actions and messages, and includes goals and options for implementation. This work will begin in Spring 2025 following execution of a contract with BWSR, expected by March.
- Admin staff will update the Commissioners’ Handbook and make it available on the website for ease in keeping it current.

2025 Work Plan

Minnesota Rule 8410.0150 requires the Commission to submit to the Board of Water and Soil Resources a financial report, activity report and audit report for the preceding fiscal year. MN Rule 8410.0150 Subp. 3 outlines the required content of the annual activity report. It includes an assessment of the previous year’s annual work plan and a projected work plan for the following year.

The Commission’s Third Generation Watershed Management Plan identifies issues, priorities, and goals for the ten-year period 2015-2024, including a portion of 2025 through the expiration of the Third Generation Plan in October. The Annual Work Plan is a more detailed set of actions the Commission undertakes to work toward meeting those goals. For 2025 the annual work plan is a hybrid of Third and Fourth Gen Plan priorities.

Special Studies and Projects

1. The Elm Creek Third Generation Watershed Management Plan expires on October 23, 2025. The Commission initiated work on the Fourth Gen Plan in June 2024 and has made good progress. *The work components for completion of the plan are below, targeting approval at the October Board of Water and Soil Resources (BWSR) meeting and adoption of the final plan at the November Commission meeting.*

| | |
|---------------|--|
| January-April | Complete final plan components (rules, monitoring, resilience) |
| | Complete implementation plan |
| | Meet with City citizens’ groups |
| | Press releases and survey for greater input |
| April-May | Informal review of initial draft |
| June-Aug | 60 day formal review and public hearing |
| Aug-Nov | BWSR review and Commission final adoption |

2. Using BWSR-provided Watershed-Based Implementation Funding (WBIF) allocated in 2023, complete the feasibility assessment for reamending North Fork Rush Creek between CR 116/Fletcher Lane and Brockton Road. *Survey and design work has been completed and alignment options identified. Final revisions and the final report will be completed in Spring 2025.*
3. Complete the Elm Creek Watershed TMDL 10 Year Review. *Phase 1, collection of information about BMPs completed since the baseline years in the TMDL modeling, the first year of follow-up monitoring noted and a trend analysis have been or are nearly completed to determine if there have been any statistically significant changes to water quality. Phase 2 is a second year of monitoring and a review of the Implementation Plan to determine implementation priorities to be included in the Fourth Gen Plan.*
4. Work together with the Shingle Creek and West Mississippi WMOs to begin work on the Joint Chloride Management Plan, funded by a BWSR Accelerated Implementation Grant. *Shingle Creek is the Fiscal Agent and is preparing a work plan and contract, expected by March 2025, with work to begin thereafter.*
5. Undertake high priority projects identified in the Rush Creek Headwaters, South Fork Rush Creek,

and Diamond Lake Subwatershed Assessments. *This activity will continue in 2025, led by Hennepin County conservation staff. The Commission has dedicated an additional \$175,000 in Watershed-Based Implementation Funding to these implementation efforts.*

6. Undertake the annual Capital Improvement Program (CIP) process, including reviewing the annual CIP, setting a maximum levy, holding a public hearing, and certifying a levy. *If necessary, hold public meeting and adopt an amendment to the Third Generation Watershed Management Plan.*
7. Provide City and Partnership Cost Share funding to support small projects as requested. *These programs are continuously open until funds are depleted.*
8. Work as requested with the entities awarded WBIF grant funding from the Elm Creek allocation to complete that work. The total awarded was \$373,590, which was contracted in December 2024 and expires December 2027. Entities include Hennepin County (shared outreach coordinator, agricultural BMPs), City of Dayton (Diamond Lake Neighborhood BMPs), and City of Maple Grove (Fish and Rice Lakes fish management).

Monitoring Program

9. Continue to partner with the Three Rivers Park District (TRPD) to share in the costs of conducting lake and stream monitoring in the watershed. *In 2025, TRPD will monitor Elm Creek at 77th Avenue (EC77); Rush Creek at Territorial Road (RT); and Diamond Creek (DC) for continuous flow and water quality. TRPD will monitor four sentinel lakes (Fish, Weaver, Diamond, and Rice). As part of the Elm Creek Watershed TMDL 10 Year Review three or four additional lakes (Henry, Jubert and French, and either Dubai or Laura if they can be accessed) and two stream sites (Rush Creek at CR 116 and CR 101) will be monitored.*
10. Fund the monitoring of one lake through Metropolitan Council's Citizen Assisted Monitoring Program (CAMP). *One lake will be monitored through CAMP in 2025, depending on volunteers.*
11. Continue to operate the monitoring station in Champlin in cooperation with the United States Geological Survey (USGS). *The cooperative agreement with the USGS will be renewed in late 2025.*
12. Promote watershed stewardship through Hennepin County's Watershed Connections program. *Hennepin County has resumed the program, but participation is in ongoing discussion.*

Education and Outreach Program

13. Continue as a member of the West Metro Water Alliance (WMWA). *The contract educator will continue to schedule classroom visits in 2025. The four member WMOs: Bassett Creek, Elm Creek, Shingle Creek, and West Mississippi, along with Richfield-Bloomington will continue to partner with Hennepin County to support a one-half time outreach coordinator to provide engagement and programming in the five watersheds.*
14. Sponsor Lakeshore/Resilient Yard Workshops as part of the Commission's Education and Public Outreach Program. The workshops are presented by Metro Blooms. *In 2025 the geographic focus area is again proposed to be Fish Lake, with the potential for an additional focus area in fall 2025.*

15. Continue as a member of Blue Thumb and WaterShed Partners. *Staff will continue to virtually attend WaterShed Partner meetings and Blue thumb meetings to share resources, bringing back programs and ideas for promotion by the Commission.*

Agricultural Outreach

16. Work with the Hennepin County Rural Conservation Specialist. Assist landowners in identifying BMPs for implementation throughout the watershed. Work with member cities to identify projects that will result in TMDL load reductions. *Hennepin County Environment and Energy Staff will collaborate with landowners to identify BMP projects as well as larger, more strategic projects for inclusion on the Commission's Capital Improvement Program (CIP). County Staff will provide updates to the Commissioners through their monthly Staff Reports.*

Routine and Administrative Actions

17. Update the Commissioners' Handbook and make available on the Commission's website. *This will replace the current printed version, which is out of date.*
18. Continue to review local development/redevelopment plans for conformance with the standards outlined in the Commission's Third Generation Watershed Management Plan. *Continue to evaluate the fee schedule and administrative processes to determine how well they are meeting the Commission's goal of funding the costs of reviewing the projects.*
19. Maintain a fee structure that reimburses the Commission for the actual cost of completing and administering project reviews. *Staff will continue to review the fee structure for adequacy and implantability and recommend revisions as necessary.*
20. Adopt a 2026 operating budget. *A Budget Committee will draft a 2026 operating budget for consideration by the Commission in May 2025.*
21. Prepare a 2024 Audit Report. *This report will be prepared by Johnson and Company, LTD and forwarded to BWSR per MN Rule 8410.*
22. Continue to populate and maintain the Commission's website www.elmcreekwatershed.org to provide news to residents, students, developers, and other individuals interested in the water resources of the watershed. *This activity will continue in 2025.*
23. Publish an annual activity report summarizing the Commission's yearly activities and financial reporting. *The 2024 Annual Activity Report will be published in April 2025 and made available to the member cities and the public on the Commission website, <http://www.elmcreekwatershed.org/annual-reports.html>.*

To: Elm Creek WMO Commissioners
Elm Creek TAC

From: Erik Megow, PE
Diane Spector

Date: February 4, 2025

Subject: Linear street reconstruction stormwater requirement clarification follow-up

| | |
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| Recommended Commission and TAC Action | Review and discuss. |
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The City of Champlin approached Elm Creek staff in December 2024 to discuss the stormwater management requirements for the reconstruction of city roads in a residential neighborhood within the Lemans Lake watershed. After discussing alternatives in a thorough and detailed memo, (City and Commission staff wished to discuss the requirements and amount of due diligence expected from cities for future residential road reconstruction projects.

This discussion and recommendations for updating the rule language was discussed at the January 2025 TAC Meeting. We understand the consensus from the January TAC meeting to be:

- For linear projects, it should be left up to the individual municipality to determine what volume control BMPs are cost-effective projects.
- No further specification of analytical steps or clarification is needed, as:
 - Cities will still need to follow the requirements of their MS4 NPDES Permit, and
 - Net decreases in rates and pollutant loads (“non-degradation”) are still required elsewhere within the current Stormwater Rule.

With no major changes to the existing rule, Staff proposes that the following bullet be added to the Exhibits section of the Stormwater Management Rule, section D.5.o. for clarification:

- *For linear projects, a narrative describing the alternatives that were considered but deemed not to be cost-effective, in conformance with the MS4 NPDES Permit, if requested by the Commission.*

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To: Elm Creek WMO Commissioners
Elm Creek TAC

From: Erik Megow, PE
Diane Spector

Date: February 5, 2025

Subject: Fourth Generation Plan
Proposed Monitoring Program

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|---|---|
| Recommended TAC/ Commission Action | Review and comment. This text will be incorporated into the Fourth Generation Plan. |
|---|---|

The Minnesota Rules governing watershed management plans require each Metro WMO to establish monitoring programs that are sufficient *“to determine whether the water quality and quantity goals of the organization are being achieved.”* The Rules do not specify what the monitoring program should be or what it should encompass but do require that this program specify where monitoring will take place, how frequently, what will be monitored, and how the data will be used.

The Commission contracts with the Three Rivers Park District to perform lake and stream monitoring and to compile and analyze the data. Your Third Generation Plan expanded the monitoring program to additional lakes and stream sites, including four “sentinel lakes” that are monitored every year (Fish, Rice, Weaver, Diamond) and three stream sites, one each on Elm, Rush, and Diamond Creeks. An additional two lakes are monitored each year on a rotating basis, and one or two lakes are monitored by volunteers through the Met Council’s Citizen Assisted Monitoring Program (CAMP). The Commission also partners with the USGS on one site on Elm Creek in the Elm Creek Park Reserve.

Commission and Three Rivers staff reviewed the detailed plan set forth in the Third Generation Plan and proposed some minor modifications to some of the details (see attached). No significant changes to the program are proposed.

In general, the components of the monitoring program include the following:

- Annual monitoring of four “Sentinel Lakes:” Fish Lake, Rice Lake, Diamond Lake, and Weaver Lake.
- Periodic monitoring of other lakes on a rotating basis.
- Routine stream flow and water quality monitoring at three sites: Diamond Creek (DC), Elm Creek (EC77), and Rush Creek (RT)
- Periodic flow and water quality monitoring at additional upstream sites on Elm Creek; South Fork Rush Creek (RC101); and Rush Creek (RC116) on a rotating basis.
- Routine flow and water quality monitoring on Elm Creek in partnership with the USGS.
- Continuing the partnership with Hennepin County to obtain water quality and macroinvertebrate surveys by volunteers as those programs are available.

- Periodic fish and macroinvertebrate collections on biotically-impaired streams to assess progress toward meeting those TMDLs, and periodic longitudinal dissolved oxygen surveys on those streams with a dissolved oxygen impairment.
- Continuation of the partnership with the Metropolitan Council to conduct lake surface water quality monitoring of other lakes by volunteers every two to three years through the Citizen Assisted Monitoring Program (CAMP).
- Each year Three Rivers Park District prepares a report on current water quality and trends, and reports water quality monitoring data to the state's EQulS database.

**Elm Creek Watershed Management Commission
Fourth Generation Watershed Management Plan
D R A F T Monitoring Program**

Minnesota Rules 8410.0100 Subp. 5 states that:

A. Each plan must establish water quality and quantity monitoring programs that are capable of producing accurate data to the extent necessary to determine whether the water quality and quantity goals of the organization are being achieved. The programs shall, at a minimum, include the location of sampling, the frequency of sampling, the proposed parameters to be measured, and the requirement of periodic analysis of the data.

BACKGROUND

The Commission operates a monitoring program that includes both routine annual sampling of lakes and streams and special monitoring as needed to assess progress toward its goals. The Third Generation Watershed Management Plan expanded the annual monitoring program to undertake more lake and stream routine monitoring and incorporate other monitoring as needed.

Diamond Creek, Rush Creek, North Fork Rush Creek and Elm Creek are Impaired Waters, and do not meet state water quality standards for several parameters, including sediment, nutrients, bacteria, chloride, and biotic integrity. Cowley, Sylvan, Diamond, Henry, Rice, and Goose Lakes are impaired by excess nutrients. The Commission in 2012-2016 partnered with the Minnesota Pollution Control Agency and Three Rivers Park District to undertake a Watershed Restoration and Protection Strategies (WRAPS) study. The WRAPS established Total Maximum Daily Load (TMDL) pollutant load reductions to achieve state water quality standards for those impairments, as well as protection activities for the water resources that currently meet state water quality standards.

The Commission's ongoing monitoring program meets the requirements of Minnesota Rules, helps determine progress toward meeting the TMDLs, and guides management decisions to support healthy aquatic ecosystems through the protection and improvement of water quality.

FOURTH GENERATION MONITORING PROGRAM FRAMEWORK

The Fourth Generation Monitoring Program has two organizing principles:

1. Continue to obtain detailed flow and water quality data annually at sites on Elm, Diamond and Rush Creeks and on sentinel lakes, and collect data on other lakes and streams on a rotating basis.
2. Collect other data as needed to document water quality trends and assess progress and guide management decisions.

Each year the Commission will evaluate this monitoring program and make modifications as necessary based on the most current data needs. The monitoring objectives guiding the Elm Creek watershed monitoring program and the assessment of data are:

- To quantify the current status of streams and lakes compared to state water quality standards.
- To quantify changes over time, or trends, in stream and lake water quality in the watersheds.
- To enhance the value of previous monitoring data by extending the period of record.
- To track and quantify the effectiveness of implemented BMPs.
- To evaluate progress toward meeting TMDL load reduction and other goals.

Monitoring data will be used:

- To guide management decisions to support healthy aquatic ecosystems through the improvements in water quality.
- To quantify any changes to receiving waters as land use conversion and development occurs.
- To convey information about the water resources in the watershed and their condition.
- To target implementation and resource protection actions based on cost-effectiveness.
- To perform TMDL/WRAPS progress reviews.
- To accumulate information to support de-listing impaired waters that have improved to meet state water quality standards.
- To assist member cities who have Municipal Separate Storm Sewer Systems (MS4s) with their annual reporting requirements.
- To support applications for grant funding.
- To calibrate and validate hydrologic, hydraulic, and water quality models

STREAM MONITORING

Table 1 sets forth the framework for stream monitoring in the Elm Creek watershed for 2025-2034. The Commission currently partners with the USGS to operate a flow monitoring station on Elm Creek in the Elm Creek Park Reserve. This station has a long-term period of record, and gauges about 81 percent of the watershed. The Commission will continue to partner with the USGS to obtain routine flow and water quality information at this site.

The Commission will also monitor flow and water quality at designated sites in the watershed (Figure 1) per year: a station on Elm Creek upstream of the USGS site (EC77); Rush Creek at Territorial Road (RC); and Diamond Creek in Elm Creek Park (DC). In addition, the Commission may from time to time undertake special stream monitoring on other tributaries, to add to the period of record, calibrate models or refine source assessments. This monitoring will continue under the Fourth Generation Plan. Some of the member cities also undertake lake and stream monitoring, especially at sites where restoration actions have been completed. This Commission is aware of these efforts and the data supplements that which the Commission collects.

Additional special stream monitoring that may be completed is longitudinal dissolved oxygen (DO) monitoring. Longitudinal monitoring assesses stream DO along the entire length of the stream from upstream to downstream prior to 9 am, when DO levels are the lowest. This data is used to better understand stream dynamics and how management actions are impacting DO in the streams.

There is limited biologic data on the resources in the watershed. The Commission may elect to undertake fish and/or macroinvertebrate sampling to supplement the data collected by the DNR or other parties at a few representative locations.

The Hennepin County Environment and Energy Department had in the past sponsored various stream and wetland water quality and biota volunteer monitoring opportunities, which had been implemented at various locations in the watershed. These programs – RiverWatch, Wetland Health Evaluation Program (WHEP), and Stream Health Evaluation Program (SHEP) were discontinued during the COVID pandemic. A new program called Watershed Connections has been developed for students in grades 6-12 and includes modules on aquatic invasive species (AIS), macroinvertebrates, and stewardship projects. This is a new program in its early stages, and over the course of the Plan the Commission may elect to assist in or sponsor some sites in the watershed.

Finally, the Commission may periodically undertake desktop (GIS and aerial photos) and field studies of stream conditions, including buffer assessments, streambank conditions, etc. Hennepin County currently completes these assessments on ditches that are under its ditch authority.

LAKES

There are numerous basins in the Elm Creek watershed, with 22 primary lakes (Figure 1). The Commission contracts with Three River Park District to undertake water quality and aquatic vegetation monitoring on lakes in the watershed. The Commission has also participated in the Metropolitan Council's Citizen Assisted Lake Monitoring Program (CAMP) since 2005, although some lakes were occasionally monitored through that program as far back as 1994. Historical lake monitoring is shown in Table 2.

The Third Generation Plan established four "Sentinel Lakes" that are monitored every year by the Three Rivers Park District for the Commission: Diamond, Fish, Rice, and Weaver Lakes. These lakes represent both deep and shallow lakes, urban and semi-urban. Other lakes are monitored on a rotating basis either by Three Rivers Park District or through CAMP. Some lakes are difficult to access; no data is available and there are no plans for monitoring unless access can be gained.

ANNUAL MONITORING PROGRAM

This Fourth Generation Plan monitoring framework is generally unchanged from the Third Generation Plan. Each year the Commission will review the proposed annual monitoring program and any other proposed monitoring for the coming year. Data are annually summarized and presented to the Commission for review and incorporation into the annual report. Results are also posted on the Commission's website.

Table 1. Elm Creek Fourth Generation Plan monitoring framework.

| Resource | Activity | Purpose | Parameters | Frequency | Comments/Standards |
|----------|--|--|--|---|---|
| Streams | Continue to partner with USGS on flow at USGS site in Elm Creek Park Reserve | Current conditions and long-term trends; TMDL compliance; annual water yield trend; calibrate models | Flow | Annually | Modify or add parameters as necessary based on current data needs |
| | Routine flow and water quality monitoring at three anchor sites: Diamond Creek (DC), Elm Creek (EC77), and Rush Creek (RT) | Current conditions and long-term trends; TMDL compliance; annual water yield trend; calibrate models | Flow, temp, pH, TP, SRP, TN, DO, TSS, specific conductance | Annually, bi-weekly | Modify or add parameters as necessary based on current data needs |
| | Periodic flow and water quality monitoring at other sites on Rush Creek (RC116), and South Fork Rush (RC101) | Current conditions and long-term trends; TMDL compliance | Flow, temp, pH, TP, SRP, TN, DO, TSS, specific conductance | As needed, bi-weekly | Modify or add parameters as necessary based on current data needs |
| | DO longitudinal and diurnal assessment on impaired streams | TMDL compliance | DO, temp | As needed | DO standards, biotic response |
| | Macroinvertebrate community | TMDL compliance | Inverts | Every 5 years | IBI Standards |
| | Volunteer stream monitoring | Current condition; trends; education & outreach | Inverts | As available | Educational Activity |
| | Fish community | TMDL compliance | Fish | Every 5 years | IBI Standards |
| | Land use/ stream condition/ buffer assessments | Long-term trends | Condition | As needed | TMDL compliance and BMP implementation |
| Lakes | Citizens Assisted Monitoring Program (CAMP) | Current condition; trends; education & outreach | Surface water TP, chl-a, Secchi depth, temp, water condition observations, | 1-2 lakes per year, biweekly, Apr-Oct | Lake water quality standards; education and outreach |
| | Sentinel Lakes annual monitoring | Current conditions and long-term trends | DO and temperature profiles, TP, SRP, TN, chl-a | 4 lakes, biweekly, annually | Lake water quality standards |
| | Periodic monitoring through Three Rivers Park District | Current conditions and long-term trends | DO and temperature profiles, TP, SRP, TN, chl-a | 2 lakes total, monthly, every three years | Lake water quality standards |
| | Vegetation surveys | Current conditions and long-term trends | Species and abundance | Spring and fall every 5 years | Lake restoration |
| | DNR fish surveys | Current conditions and long-term trends | DNR protocol | DNR schedule | Lake restoration |
| Other | Special source assessment and other monitoring | Collect one-time or periodic special monitoring, such as: inflow and outflow of target wetlands; small streams; BMP effectiveness; biology | As needed | As needed | Some special monitoring may require cost-share from a benefitting MS4 |
| | Periodically log BMPs undertaken in the subwatershed of each resource | Progress toward meeting load reductions | Location, area treated, TP, TSS, and volume removals | As needed | Member cities report annually |

Table 1. Lake monitoring history since 2009.

| Year | Cook | Cowley | Diamond | Dubay | Fish | French | Goose | Henry | Jubert | Laura | Medina | Mill Pond | Mud | Rice | Sylvan | Teal | Weaver |
|------|------|--------|---------|-------|------|--------|-------|-------|--------|-------|--------|-----------|-----|------|--------|------|--------|
| 2025 | | | T | RB | T | RO | | T | RO | RB | | | | T | | | T |
| 2024 | | T | T | | T | T | | | | | | | | T | T | C | T |
| 2023 | | T | T | | T | | | | | | | | | T | T | | T |
| 2022 | | | T | | T | | T | | | | | | T | T | | | T |
| 2021 | | | T | | T | | T | | | | | T | T | T | | | T |
| 2020 | | | T | | T | | | | | | | | | T | | C | T |
| 2019 | | | T | | T | | | | | | | | | T | | | T |
| 2018 | | | T | | T | | | | C | | | | | T | | | T |
| 2017 | | | T | | T | | | | C | | | | | T | | | T |
| 2016 | | C | T | | T | | | | C | | | | | T | | | T |
| 2015 | | | T | | T | | | | C | C | | | | T | | | T |
| 2014 | | | T | C | T | | | | | C | | T | | T | C | | T |
| 2013 | | | T | C | T | T | | | | C | | T | | T | C | | T |
| 2012 | | | T | C | T | T | T | | | | C | T | T | | C | | T |
| 2011 | | | T | C | T | T | T | C | | | | T | T | T | | | T |
| 2010 | | C | T | | T | T | | C | | | | T | | T | | | T |
| 2009 | | C | T | | T | T | | C | | | | T | | C | | | T |

C = CAMP; T = Three Rivers; RB = recommended from budget; RO = recommended from other source.

Shaded = Impaired Waters; Sentinel Lakes: Diamond, Fish, Rice, Weaver

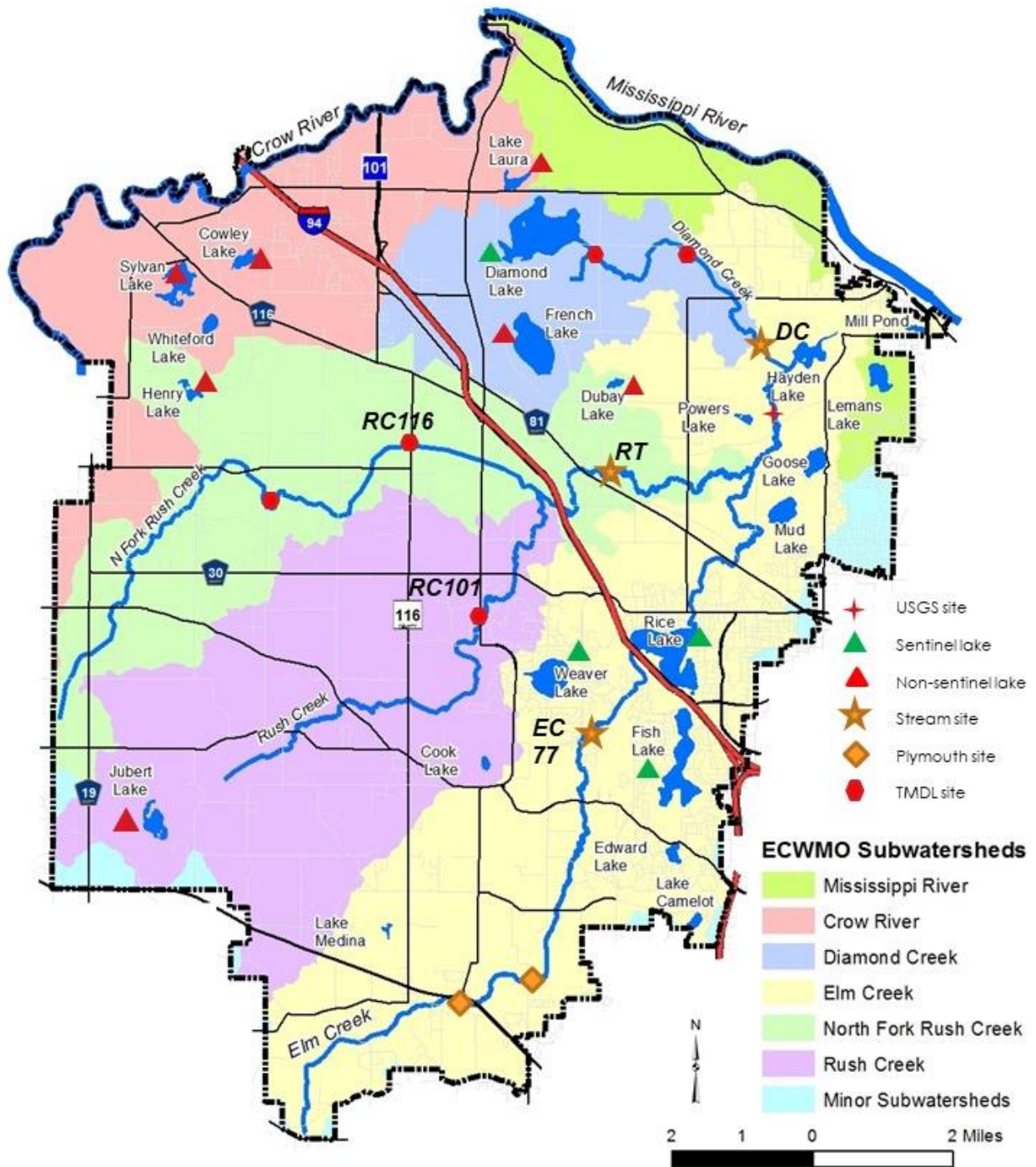


Figure 1. Elm Creek WMC Fourth Generation monitoring.

To: Elm Creek WMO Commissioners
Elm Creek TAC

From: Erik Megow, PE
Diane Spector

Date: February 5, 2025

Subject: Fourth Generation Plan
Public Input Plan

**Recommended TAC/
Commission Action**

For discussion and direction.

As the work developing the Fourth Generation Plan winds down and the Plan takes shape, it is time to consider ways to obtain input from the general public, in addition to the city-designated CACS. This public input process is by nature more high-level and has a secondary benefit of being a way to inform the general public about the Commission, the work you do, and how they can be involved if they should so choose.

There are a few potential avenues for informing the public and taking input. The short list below includes online options such as the Commissions and city websites and social media, and local news outlets. There are options for various surveys, which can be informative. However, most of these types of surveys are self-selecting to people who care more deeply one way or another enough to take the time to respond, the results can be skewed and not scientific.

Below are some possible input options. We are open to discussions and suggestions about others, including those that cities may have found effective and useful.

- Enhance the Plan webpage with more details on specific accomplishments and proposals
- Add a form on the Plan webpage to take input
- Add a simple survey on web page to vote on priorities
- Provide content for city websites and social media
- Send a press release to CCX and Post Newspapers describing the Plan and links to survey
- Send a press release to CCX and Post Newspapers announcing availability of the draft plan, some highlights, and how to comment
- Publish a more detailed online survey targeting CACs, lake associations, elected officials, etc.
- Provide posters and printed information and an option to submit written responses at tabling events