



Carver County Water Management Organization Citizen Advisory Committee

- 1. New member introductions**
- 2. Roll call**
- 3. Elect Chair and Vice Chair**
- 4. Operating rules**
- 5. 2024 meeting calendar, details, and topics**
- 6. Approval of the November 30, 2023 minutes**
- 7. Approval of the January 30, 2024 agenda**
- 8. Business items**
 - a. 2023 Annual Report
 - b. 2023 monitoring results
- 9. Information items & project updates**
- 10. Next meeting**

February 27, 2024

January 30, 2024

Meetings held at the Carver County Government Center, EOC conference room, 600 East 4th St. Chaska, MN 55318. Virtual option with Microsoft Teams. Contact mseveland@co.carver.mn.us for details.

6:00 p.m. to 8:00 p.m.

Committee Mission

Work with CCWMO staff to proactively make recommendations to the County Board on matters relating to water management including;

- projects and project prioritization
- Funding and water levy
- Water Plan, Groundwater Plan & Solid Waste Plan
- Water quality and TMDL program and projects
- Education program and projects
- Feasibility studies ¹

MEETING OF THE
CARVER COUNTY WATER MANAGEMENT ORGANIZATION ADVISORY COMMITTEE
MEETING MINUTES
Tuesday Nov. 28, 2023

COMMITTEE MEMBERS PRESENT

Attending virtually

<i>Jim Boettcher</i>	<i>Citizen representing Commissioner District 1</i>
<i>Mary Strother</i>	<i>Citizen, Bevens Creek</i>
<i>Marcus Zbinden</i>	<i>SWCD Board Representative alternate</i>
<i>Nathan Lindall</i>	<i>Citizen representing Commissioner District 3</i>
<i>Lori Cox</i>	<i>Citizen representing Commissioner District 5</i>
<i>Mike Lynch</i>	<i>Citizen representing Commissioner District 4</i>

Attending in person

<i>Kayla Pascoe</i>	<i>Citizen, Carver Creek</i>
<i>Carroll Aasen</i>	<i>Citizen, East & West Chaska Creek</i>
<i>Kevin Zahler</i>	<i>Citizen representing Commissioner District 2</i>

COMMITTEE MEMBERS ABSENT

<i>Doug Kammerer</i>	<i>Citizen, Crow River</i>
<i>Stan Wendland</i>	<i>SWCD Board Representative</i>

STAFF PRESENT

<i>Madeline Seveland</i>	<i>Carver County Planning & Water Mgmt.</i>
<i>Tim Sundby</i>	<i>Carver County Planning & Water Mgmt.</i>
<i>Paul Moline</i>	<i>Carver County Planning & Water Mgmt.</i>
<i>Adriana Atcheson</i>	<i>Carver County Planning & Water Mgmt.</i>
<i>Andy Edgcumbe</i>	<i>Carver County Planning & Water Mgmt.</i>
<i>Andrew Dickhart</i>	<i>Carver County Planning & Water Mgmt.</i>
<i>Mike Wanous</i>	<i>Carver County Soil & Water Conservation District</i>
<i>Jacob McLain</i>	<i>Carver County Environmental Services</i>

Meeting Minutes

The meeting was called to order at 6:03 by Carrol Aasen.

1) Approval of the Oct. 24, 2023, minutes

Aasen asked for an approval of the minutes. Pascoe moved to approve the Oct. 24, 2023, minutes. Lindall seconded. Motion passed unanimously.

2) Approval of Nov. 28, 2023, agenda

Aasen asked for an approval of the agenda. Lindall moved to approve the Nov. 28, 2023, agenda. Lynch seconded. Motion passed unanimously.

3) Notes from the field

Andy Edgcumbe presented on the findings of an aquatic plant survey at Myers Lake, located near Norwood Young America, this past September.

Edgcumbe described the monitoring protocols used for aquatic vegetation sampling.

- Staff found a total of 21 native aquatic plant species in Myers Lake and no invasive species. Of the species found during the survey, 11 were submerged species living underwater, 6 were floating species found right at the surface of the water, and 4 were emerging species which stick out of the water.
- Staff only sampled the main bay of Myers Lake because the two western bays were dry due to drought.
- The number of species richness found was exceptional.

Edgcumbe reviewed the different plants, where they were found in the lake, and their abundance. Plans included white waterlily, coontail, flatstem pondweed, slender naiad, common bladderwort, small bladderwort, and stonewort.

Edgcumbe shared interesting facts about some of the plants.

- Bladderworts are carnivorous plants that have no roots. Their bladders consume algae and zooplankton. Bladderworts were found throughout the entire lake.
- Small bladderwort was a new finding that has not been found during surveys in any other lake in Carver County.
- Bladderworts are good indicators of water quality.
- Stonewort was only found at 3% of the sites. Staff called in the Minnesota Department of Natural Resources aquatic plant specialists for help in identifying this plant. It is a rare species identified as *Nitella furcata*, and this is the farthest south it has been found in Minnesota.

Edgcumbe shared that the aquatic plant community at Myers Lake was excellent. The species richness (number and diversity of species) and floristic quality index (quality of plants in the community) exceed the state standards for water quality. Myers Lake has the highest floristic quality index score of all lakes in Carver County.

Staff also found freshwater sponge which is another indicator of exceptional water quality.

Zahler inquired if a freshwater sponge was an alga. Edgcumbe responded that it is another kind of animal. They are made from tissue and filter the water like a freshwater mussel.

Pascoe inquired what type of land use surrounded Myers Lake. Edgcumbe responded that the land use is agricultural. Pascoe inquired what there was for runoff protection around the lake. Edgcumbe responded that there is a buffer of cattails and forest surrounding the northern and western sides of the lake. The lake is also at the top of the watershed which is better for its water quality. Mike Wanous added that the watershed draining into this lake is tiny. He guessed 80-100 acres of land is all that

drains into the 50-acre lake. He explained that the lake is not hydrologically connected with any other water body, so rough fish cannot get in and degrade water quality. The lake's outlet is to the south, but it only really flows during high events. These factors help protect the lake.

Zahler inquired how deep the lake is and what is the clarity. Edgcumbe said it depends on the water level. The lake was 4 feet deep in early summer. Secchi depth readings were close to the bottom of the lake. Toward the end of the monitoring season, the water depth was closer to 2 feet with the drought. It is a shallow lake.

Zahler shared that Dr. Peter Sorensen from the University of Minnesota's Aquatic Invasive Species Research Center is looking for a healthy lake with aquatic plants to isolate for the future.

Strother inquired if the lake freezes out in the winter and how that affects what is living there. Edgcumbe responded staff have not been out there in the winter, but his assumption is that it would freeze over. It likely froze out last winter and the plant species persisted. The two western bays were completely dry and so it would be interesting to see how the plant community responds when water returns there, perhaps next year.

Zbinden inquired if staff are required to do vegetation surveys during a certain month to get the most species. Edgcumbe responded that staff did the Myers Lake survey in September. Surveys are done between June and September as those are the optimal times when most plants grow. However, if staff are targeting curly leaf pondweed, monitoring may be done in May instead.

Zbinden inquired if the dots on the lake image showing survey points 60 meters apart are standard. Edgcumbe responded that the 60 meters is not a requirement. The distance between sampling points depends on how big the lake is and how many contours there are. A survey needs 50-75 sampling points for a shallow lake. The sampling points on Lake Waconia are farther apart.

Cox commented that likely none of the private landowners recreate on it. Edgcumbe shared that some of them duck hunt, but there are no docks. It is too shallow to recreate on. Cox added that her point was humans are not interfering.

• **2024 Subsurface Sewage Treatment System**

Paul Moline introduced the topic and Jacob McLain, a senior environmentalist with Carver County. McLain presented a background on the Subsurface Sewage Treatment System program and the 2024 program plan.

Program background

- County Board adopted a direct discharge incentive program in 2008 following the state listings of Bevens and Carver Creeks as impaired for bacteria.
- Septic systems with direct discharges to waters were identified as a source of bacteria. The program was designed to target those systems and reduce bacteria loads to the creeks.

- Crow River was also listed as impaired for bacteria and in 2020 the Board recommended targeting the Crow River watershed as well for the program.

McLain reviewed the typical components of a septic system, how they operate, and explained what a direct discharge is. A direct discharge occurs when the main line from the house goes to a drain tile or surface water, or when there is a septic tank, but no drain field is used or functioning.

Program accomplishments

- Replaced 552 systems to date and have provided 169 low interest loans.

Process

- The WMO provides \$100,000 toward the program and recommends priority sub-watersheds.
- The County Board approves annual program.
- Carver County Environmental Services implements the program.

McLain shared a map showing the sub-watersheds that had participated in the program and which sub-watersheds were proposed to be targeted for 2024. The 2024 sub-watersheds proposed for the program are as follows.

- Crow River: 20.3 sub-watershed (Camden Twp portion) with 20 likely systems.
- Bevens Creek: sub-watershed BE 21 with 12 likely systems.

This proposal continues the program in the Crow River watershed while also targeting properties in a part of Bevens Creek. The sub-watershed BE 21 was previously targeted for the program in 2011, but due to older technology and information, there were likely some systems that were missed.

Program eligibility

- Property must be located in priority sub-watershed.
- Must have no previous trigger (i.e., current enforcement, compliance inspection as a result of property transfer, complaint, or building permit).
- The County provides a cash incentive of \$2000, currently.
- Low interest loans are available up to \$25,000.
- Landowner must install system by Oct 31, 2024, or request extension to 2025.

Incentive

- The cost share incentive has remained at \$2000 since the program began in 2008. When the program started the average system cost was about \$8000-\$12,000. The average system costs today is \$20,000-\$30,000. A raise in the cost incentive would help landowners participate.

Recommendation

- Staff are recommending the 2024 SSTS direct discharge priority sub-watersheds which includes the Crow River 20.3 sub-watershed and Bevens Creek BE21 sub-watershed.

Zahler ask for clarification on if someone was outside of the priority sub-watershed they simply wouldn't qualify for the program? McLain said the priority sub-watersheds are the priority for the program, but residents outside those areas can apply. If there was not enough funds, staff would lean towards the priority areas.

Cox inquired if the cost incentive is a grant. McLain responded yes. Cox inquired about the loans. McLain responded that through the program, the county offers a low interest loan at 1.5%. For properties located in the priority sub-watersheds they have 10 years to repay the loan. If located outside the priority sub-watershed, they applicant can take 5 years to pay back.

Cox inquired if the loan or cash incentives are first come first serve or need based. McLain responded that we have set aside a certain amount of funds for the loans and those are first come, first serve.

Zbinden inquired if a direct discharge system is a non-compliant system that may be an imminent public health threat, then why doesn't the department just do enforcement to gain compliance. McLain responded that it is hard to do enforcement if we don't know much about the septic system. Unless there is a property transfer or compliance inspection we don't know if the system is a threat to public health. The systems that are targeted through this program are sites staff think may be possible direct discharge. If there is a direct discharge system that has been identified, then we do go forward with enforcement.

Zbinden asked if the \$500 increase in the cost incentive was enough. McLain responded that staff think it is enough to help homeowners with the cost of the system. Staff are looking to slowly start the increase to meet the demand.

Cox asked about the additional county or state programs or grants available. McLain responded that there is a county sliding scale grant program. McLain responded that the County has received two grants to further the program. Both serve low-income residents and have a sliding scale approach, so the amount provided to the applicant is based on income.

Lynch inquired how much of the \$100,000 loan funds are used every year? McLain responded that last year there were 17 sites that applied using approximately \$34,000. The reason staff don't use more of the funds is because there are sites outstanding from previous years and enforcement of these systems is hard and slow.

Moline added that the funds had built up pretty high and we are trying to spend it down. That is why in our budget for 2024, we are not requesting more funds for this program. Lynch commented that he would like to make sure the funds will not run short. Moline shared that he doesn't think they will this year. In 2025, staff might be asking for additional funds. Lynch inquired if the department would borrow if they ran short. Moline responded no. After funding the priority sub-watershed applicants, the program is first come, first serve. If funds ran out, staff would plan for the following year.

Cox asked about how many sites were receiving enforcement. McLain responded around 30-40 sites. Coxed ask if staff thought the landowners might move ahead with replacement if they knew these programs were in place. Moline responded that letters were sent to all those on the non-compliant list

with information about the grants. He added that there are requirements with the grants and one of them is that if the property is going through an enforcement activity, then they are not eligible.

Cox inquired if that staff have any idea on the bacterial numbers for sites. McLain responded Edgcumbe provides the E. coli numbers. Bevens Creek, site BE 21, was the site with the highest counts, which is why it was selected again for 2024.

Zahler asked for clarification about staff knowledge of non-compliant sites. McLain responded that typically the sites staff target do not have records, so staff do not know 100% if there is a system or not. Landowners have an opportunity to provide proof that there is a compliant system on site via an as-built.

Pascoe moved to recommend the 2024 SSTS Direct Discharge priority sub-watersheds: Crow River: 20.3 Sub-watershed (Camden Twp portion) & Bevens Creek: Sub-watershed BE 21. Zbinden seconded. Motion passed unanimously.

The committee discussed and agreed on increasing the cost incentive from \$2000 to \$2500 for the 2024 program. Zahler moved to increase the incentive to \$2500 for the 2024 program. Lynch seconded. Motion passed unanimously.

• **2024 Aquatic Invasive Species Program Plan**

Andrew Dickhart presented on the proposed 2024 aquatic invasive species program plan.

Dickhart provide background on aquatic invasive species. These species are organisms that invade ecosystems beyond their natural and historic range. Not all non-native species are invasive to a particular eco-region. Aquatic invasive species have a different role than native species. They often disturb the ecosystem as compared with native species which have had lots of time to evolve and balance with their ecosystem.

Aquatic invasive species are always hyper adaptable, competitive, and are ecologically disruptive. Often, they have the following characteristics: fast growth, rapid reproduction, high dispersal, lack of predators, ability to adapt to different environments, and they displace native species by using limited resources more.

Impacts of aquatic invasive species

- Biodiversity loss.
 - o Aquatic invasive species are the second major contributor to biodiversity loss. They reduce plant, fish, and animal populations and degrade ecosystems.
- Economic.
 - o Aquatic invasive species reduce property values, damage boats and equipment.
- Human health.
 - o Some aquatic invasive species have toxins, and some are parasites.

Local impact

- Dickhart shared a few documented impacts of aquatic invasive species in Minnesota.
 - o Declines in native mussel and snail populations due to zebra mussels.
 - o Displacement of native vegetation both in lakes and wetlands. Staff have noticed this in the County.
 - o Impact on fish populations. In Lake Mille Lacs, the University of Minnesota looked at the impact of zebra mussels on young walleye and perch. Zebra mussels are competing against these young fish for planktonic species of food and thus the younger fish grow slower. When fish grow slower, they are more susceptible to predation.
 - o Decline in native frog species.
 - o Alternation of wetland ecosystems.

Aquatic invasive species program history

2011 – 2013

Minnesota Department of Natural Resources extends watercraft inspection authority to local governments. Inspections started at Lakes Waconia, Minnewashta, Bavaria, Eagle, Hydes, and Reitz.

2014

Start of the state aquatic invasive species prevention aid distributed to counties. Funds distributed based on number of boat accesses in each county.

2015

City of Chanhassen and additional partners join the County program and provide funding. Added Lakes Lotus, Susan, and Ann to inspection program.

2016

County hired full time aquatic invasive species program coordinator. Expanded program to prevention and management strategies.

2017-2019

Various changes occur in County aquatic invasive species program due to small shifts in funding. Dropped some lakes for inspections to respond to a drop in funds and trialed a roving inspector.

2020 – present

Significant reduction of watercraft inspection hours due to pandemic challenges and hiring shortage.

Lindall inquired if invasive species also include goldfish and common carp and those county projects. Dickhart responded yes goldfish and common carp are invasive species, but this presentation and budget does not include those projects. Those projects are budgeted for and funded by grant funds.

2024 aquatic invasive species program proposal

Prevention program changes

- Watercraft inspections
 - o Fewer inspection hours due to staffing challenges similar to the last 3 years.
 - o Reduced dedicated inspections on Lake Bavaria.
 - o Revisit roving inspections.
 - o Fewer lakes with dedicated inspection service but more coverage county-wide.

Dickhart shared a graph showing the 2022 completed inspection hours for several lakes and the 2023 budgeted hours for those same lakes. Dickhart explained that staff knew they had overbudgeted for 2021 and 2022 and wanted to budget for 2023 for what they would be able to staff.

Zahler inquired where the decontamination unit was located. Dickhart responded it was almost always located at Lake Waconia's public access, but a couple times at Lake Minnewashta.

Zahler inquired if an inspector could send a contaminated boat to Waconia if they arrived really contaminated. Dickhart explained that this is typically what we do but staff can't require it. Zahler asked for clarification that if a person came to a lake with a contaminated watercraft that person was already breaking the law and should be cited. Dickhart responded that inspectors would emphasize the use of the decontamination unit, but also let them know they are not in compliance and give them a form that says they are allowed to move their watercraft to the decontamination unit.

2024 preliminary watercraft inspection lake locations and inspection hour allocations

- Carver County Water Management Organization lakes
 - o Lake Waconia, 1500 hours
 - o Lake Bavaria, 280 hours + roving inspector hours
- Minnehaha Creek Watershed District lakes
 - o Lake Minnewashta, 1500 hours
 - o Piersons Lake, 450 hours + roving inspector hours
- Riley Purgatory Bluff Creek Watershed District lakes
 - o Lotus Lake, 1500 hours
 - o Lake Ann, 280 hours + roving inspector hours
 - o Lake Susan, 280 hours + roving inspector hours

Dickhart explained this proposal is subject to partner organization budget approvals. There may be potential additional hours on Lake Ann due to the 2023 zebra mussel impairment listing if partners agree.

Cox inquired about the hours of inspection per day. Dickhart responded that lakes are typically scheduled for about 7 hours a day. There are smaller lakes that may only have an afternoon or a morning shift, and other lakes, like Lake Waconia have 16-hour days.

Dickhart explained the logistics of a roving inspector. There are 600 hours budgeted for a roving inspector that would be distributed among County lakes with public boat access.

Pascoe asked for clarification that roving inspectors will be responsible for off hours at Lakes Bavaria, Piersons, Ann, Susan as well as any additional lakes not listed. Dickhart responded that is correct. Staff will prioritize roving inspections at lakes that are busier.

Education and outreach

- At the October aquatic invasive species stakeholder meeting, stakeholders emphasized need for education as watercraft inspection funds are re-allocated.
- There may be \$7000-\$8000 available for an education program.
- Staff will work with stakeholders and advisory committee to brainstorm options for use of funds.
- Options
 - o Include more education at watercraft inspections.
 - o Focus on aquarium trade.
 - o Focus on dock and boat lifts that move from lake to lake.
 - o Pop-up aquatic invasive species educational booth for festivals and community events.

Seveland shared that at the stakeholder meeting, Zahler had suggested a rotating QR code sign at public accesses with links to different informative videos and websites.

Zahler shared that social media is a necessary media outlet to reach people.

Management changes

- In-house management
 - o Staff with non-commercial pesticide license to treat phragmites and purple loosestrife. This would give the organization the ability to save some funds and also spot check the work.
 - o Re-allocate funds from watercraft inspections to vegetation management. Staff will determine the best use for the funds. Stakeholders were supportive of this during a survey taken in early 2023.
- Vegetation management options for re-allocated funds
 - o Grant match for larger vegetation control projects.
 - o Pass through program to provide cost share grants to non-profits (lake associations, homeowner associations, etc.).
 - o Phragmites and purple loosestrife control.
 - o Public access boat launch clean-up to remove weeds on and around boat launch areas, docks, beaches, etc.)

Dickhart asked the committee if they had any additional ideas.

Zahler commented that \$20,000 is a small amount for treating a lake so projects need to be focused. He added that he likes the idea for cleaning up vegetation around public accesses.

Dickhart shared that staff are requesting a motion to recommend the 2024 AIS program which includes 1) revisiting roving inspections, 2) slight reduction of dedicated inspection hours, 3) use of re-allocated education and outreach dollars, 4) use of re-allocated dollars for vegetation management, 5) staff to perform in-house management of PPL and phragmites and/or other introduced species.

Zahler asked for clarification if all that was mentioned is already funded. Dickhart responded that the state aid from the Minnesota Department of Natural Resources will be about \$140,000 and that is consistent with funding received for the last 6-7 years. The WMO levy allocates funding that covers the coordination of the program and the lead inspector, and the County levy, City of Chanhassen, Riley Purgatory Bluff Creek Watershed District, and Lotus Lake Conservation Alliance provide funds toward the inspections program. Dickhart shared that the WMO has the funding needed for everything presented on this evening. Moline commented that staff recommended adding \$10,000 from the WMO into the aquatic invasive species program in 2024. Staff are assuming that the rest of the funding will be similar to previous years.

Zbinden moved to approve the recommendation as presented. Zahler seconded. Motion passed unanimously.

- **2024 Water Plan Update**

Paul Moline introduced the plan for a 2024 water management plan update.

Background

- Our WMO plan was adopted in 2020. The plan contains the policies and implementation steps to create and maintain a project list. The project list, listed as Table 5-5 in the plan, is used to plan and budget for capital projects and grant requests.
- Moline shared that the project highlights presented at the October meeting all came from the plan's project list.
- To qualify for state grant requests and to support project requests to the Board, the CCWMO reviews and updates the project list on a bi-annual basis.

Moline shared the implementation strategy from the plan that says staff will update Table 5-5 and maintain an up to date project list.

Moline share a screen shot of the project list.

Cox inquired if there was a column in the table that describes the project's status. Moline responded that there is a column that describes the project's timeframe such as short, medium, long, or ongoing.

Along with project list, staff are looking to update the priority water bodies categories within the plan. Prioritizing waterbodies (lakes and streams) help prioritize implementation.

The purpose is to:

- Help guide implementation decisions based on both water resource issues and how the resource is used by the community.
- Help differentiate between similar projects in different parts of the CCWMO.
- Utilize data collected by the CCWMO in management and implementation decisions.
- Create a framework for project implementation that can be updated over time as new data and information becomes available.

Moline share the current priority water body map and the list of factors staff use to identify priority status. The plan identifies that staff will update the water body prioritization as new monitoring and other data become available as the WMO utilizes the ranking to prioritize projects.

Process for updating water body priority list.

- WMO Staff propose changes.
- Reach out to city staff through our technical advisory committee for input.
- WMO Advisory Committee provides input and a recommendation.
- The draft plan amendment is presented to the County Board. Staff request that it be released for public comment.
- Edits to the amendment made based on feedback.
- Revised draft plan amendment is presented to the County Board. Staff request to send it to the Board of Water & Soil Resources.
- The Board of Water & Soil Resources provides review.
- The final plan amendment is presented to the County Board. Staff request to adopt the new amendment.

Moline shared that if the priority water bodies amendment looks to take a longer time review and approve than the projects list, the two amendments may split into two separate approval processes. Staff want the projects list amendment completed by June to match grant timelines.

Cox commented that she was surprised in the prioritization process that lakes stand alone, given in areas where there are connections one water body can impair another. Cox inquired if that was something the state agencies considered. Moline responded that the impairment list comes from the Minnesota Pollution Control Agency and is based on how they define a water body. He shared that they break up streams into segments when listing an impairment. Sundby added that the Minnesota Pollution Control Agency treats lakes and streams differently on their impaired waters list. Streams are broken up into different reaches based on monitoring locations and natural flow breaks.

Moline stated that staff will keep the committee up to date if we plan to add any factors to the list used to prioritize water bodies.

Cox commented that cumulative impacts to a water body are important to consider, if you have an impaired stream status that has a cumulative impact down the stream. Moline responded that might be something we could use the data we have to look at, and that it would also be nice to coordinate with the state on what impaired waters are listed in the County.

4) Information items

Seveland shared that there is no meeting in December and the next meeting is January 30, 2024. Additionally, with Doug Kammerer completing his 9 years on the committee, there is an opening for a Crow River representative.

Moline shared that the Board should adopt a final WMO levy on December 19.

Cox inquired about follow up with a property owner on the Carver Creek feasibility study. Moline responded that he has not yet scheduled that meeting with the property owner. Moline shared that the Summergate study is on hold but has no further information.

Meeting adjourned at 8:04 p.m.



CCWMO Citizen Advisory Committee

January 30, 2024 Meeting

Business Item
<i>Operating rules</i>
Water Management Plan Related Goal

Summary:

The Water Management Organization Advisory Committee annually reviews and approves their operating rules. Operating rules are based on the County Boards operating rules and identify and set up procedures relating to elections of Chair & Vice Chair, attendance, membership, compensation and more. Each January, the Committee reviews, amends if needed, and adopts the operating rules for the coming year.

Discussion Points:

- Are there any changes or recommendations to the current operating rules?

Recommended WMO Citizen Advisory Committee Action:

- Staff recommends the committee adopt the operating rules as they exist or make recommendations citing any changes deemed necessary.

Attachments:

- Operating rules

Carver County Water Management Organization Citizen Advisory Committee Operating Rules

I. Overview

A. Role & Purpose

The Carver County Water Management Citizen Advisory Committee's (CAC) role is to make recommendations to the County Board on matters relating to water management include;

- Project and project prioritization
- Funding and water levy
- Water Plan, Groundwater Plan and Solid Waste Plan
- Water quality and Total Maximum Daily Load (Impaired Waters) program and projects
- Education program and projects
- Feasibility studies

As an advisory committee, the CAC serves a statutory, policy, and operational purpose within Carver County.

B. Goal

- The goal of the Plan is to protect, preserve and manage the CCWMO's surface and groundwater systems in the midst of rapid growth and intensive agricultural activity.

II. Amendments to the Operating Rules

During the statutory meeting (the last Tuesday in January of each year), the CAC shall review, amend if necessary, and adopt the operating rules for the year.

Any time throughout the year, the Committee may amend (or suspend) the operating rules by an affirmative vote of the members. Changes shall be effective immediately upon passage.

Any member of the Committee or County staff may initiate action to amend the operating rules

III. Organization

A. Membership

An open appointment policy governs the process for recruiting applicants to the Committee. The actual appointments are made by the County Board. The Carver County Board will attempt to select those candidates who will best represent the county and the committee's needs.

Membership consists of:

- 5 representatives from Commissioner Districts: one from each district.
- 1 representative from the Soil & Water Conservation Board.
- 4 representatives from watersheds. One from each watershed.
- 1 representative from the Technical Advisory Committee

B. Terms of Office

The County Board has standardized the length of term and number of terms each advisory committee member may serve. The length of term is 3 years and the maximum number of consecutive terms each member may serve is 3.

C. Vacancy

When a vacancy exists due to resignation or other reasons, the County Board will follow the open appointment process. For the purpose of maintaining uniform length of terms the new appointee's partial term will be assumed to be a full term regardless of actual time remaining in the unexpired term.

D. Officers

The Citizen Advisory Committee, at its statutory meeting elects from its members a Chair and a Vice-Chair. The Chair presides at committee meetings, preserves order, and decides on questions of order and subject to vote of the committee. The Vice-Chair performs the duties of the chair when the chair is unable to perform those duties. Only committee members appointed by the County Board are eligible to serve as Chair or Vice Chair of the committee

If the Chair and Vice-Chair are absent from any meeting, the members present shall choose one of their members as temporary Chair.

The Chair of the Board may make a motion and has the same voting rights and responsibilities as other members.

E. Compensation

Individuals appointed by the County Board to the CAC receive a per diem and mileage reimbursement for attendance at regular and special meetings of such committees unless otherwise stated by the County Board. The per diem level is established from time to time by County Board and/or Minnesota Statute.

F. Quorum & Attendance Policy

A quorum is present if 50% + 1 of the existing members of the committee are present.

Committee members missing three (3) consecutive meetings in a year without the formal consent of the advisory committee shall be deemed to constitute a resignation of a member and a vacancy thus created shall be filled thereafter as provided by the open appointment process.

G. Meeting location and details

The Committee meets monthly the last Tuesday of every month except December. The meetings take place at 6:00 p.m. at in the Emergency Operations Center conference room on the lower level of the Carver County Courts building at 604 East 4th St. Chaska, MN 55318 with a hybrid option.



CCWMO Citizen Advisory Committee

January 30, 2024 Meeting

Business Item
<i>2024 meeting calendar, details, and topics</i>
Water Management Plan Related Goal

Summary:

Staff will review the 2024 meeting calendar. This includes meetings dates and times, meeting structure, and list of action and information items for 2024. Staff are seeking input from the committee on the current meeting structure, and on any additional informational topics of interest in 2024.

Discussion Points:

- Any changes to the hybrid meeting structure.
- Any additional topics of interests.

Recommended WMO Citizen Advisory Committee Action:

- Feedback on meeting structure and topics for 2024

Attachments:

- Appointments and meeting calendar

CARVER COUNTY WATER MANAGEMENT ORGANIZATION

CITIZEN ADVISORY COMMITTEE

COMMITTEE MEMBERSHIP as of 1/22/2024

Stan Wendland – SWCD Board Member Representative
(**Marcus Zbinden**- SWCD Board Member Alternate)

COMMISSIONER REPS

Jim Boettcher - Citizen Rep Comm District 1 (Degler)	Term 3	Expires 2025
Kevin Zahler - Citizen Rep Comm District 2 (Workman)	Term 1	Expires 2024
Nathan Lindall – Citizen Rep Comm District 3 (Udermann)	Term 2	Expires 2025
Mike Lynch - Citizen Rep Comm District 4 (Lynch)	Term 3	Expires 2026
Lori Cox – Citizen Rep Comm District 5 (Fahey)	Term 2	Expires 2024

WATERSHED AREA CITIZEN REPS

Kayla Pascoe – Carver Creek	Term 1	Expires 2025
Michael Wegner – Crow River/Pioneer Creek	Term 1	Expires 2026
Mary Strother – Bevens Creek	Term 3	Expires 2024
Carroll Aasen – East/West Chaska Creek	Term 3	Expires 2024

TBD - Chair
TBD - Vice Chair

Primary Committee Staff

Paul Moline – Public Services Deputy Director
Madeline Seveland– Water Management Organization Outreach & Engagement Specialist
Mike Wanous – Soil & Water Conservation District Manager

Meeting Dates 2024

Meeting 1 - Tuesday, January 30 – 6:00pm
Meeting 2 - Tuesday, February 27 – 6:00pm
Meeting 3 - Tuesday, March 26 – 6:00pm
Meeting 4 - Tuesday, April 30 – 6:00pm
Meeting 5 - Tuesday, May 28 – 6:00pm
Meeting 6 - Tuesday June 25 – 5:20pm TOUR
Meeting 7 - Tuesday July 30 – 6:00pm
Meeting 8 - Tuesday August 27 – 6:00pm
Meeting 9 - Tuesday, September 24 – 6:00pm
Meeting 10 - Tuesday October 29 – 6:00pm
Meeting 11- Tuesday, November 26 – 6:00pm



CCWMO Advisory Committee

January 30, 2024 Meeting

Business Item

2023 Annual Report

Water Management Plan Related Goal

- Goal 4 Awareness and Behavior. To provide those living, working, and recreating in the CCWMO with the knowledge, skills, and motivation needed to make positive behavior changes that protect surface water and groundwater resources.
- Goal 6 Evaluating Effectiveness & Progress. To collect data and use the best available science to identify problems and evaluate the effectiveness of solutions.

Summary:

Staff members will present a summary of the 2023 CCWMO annual report.

The CCWMO annual report provides a look back at the activities accomplished as well as challenges encountered by the CCWMO in the previous year. It contains information on WMO activities, projects, programs, planning efforts, and financial activity for 2023. The report is currently in DRAFT form (pending County audit) and will be distributed to the County Board, and subsequently to the Minnesota Board of Water and Soil Resources.

Discussion Points:

- Feedback on report summary.

Recommended WMOAC Committee Action:

- Recommend submittal of the 2023 annual report to the County Board later this year, and the Minnesota Board of Water and Soil Resources

Attachments

- Draft 2023 Annual Report

2023 ANNUAL REPORT (DRAFT)

CARVER COUNTY WATERSHED
MANAGEMENT ORGANIZATION





ABOUT THE CCWMO

The Carver County Water Management Organization (CCWMO) is responsible for performing management tasks including planning, funding, regulation, and implementation of the Carver County Water Management Plan. The CCWMO includes the following watersheds; Bevens Creek, Carver Creek, East and West Chaska Creek, Pioneer Creek, and the Crow River (see map on page 3).

In order to fulfill legislative requirements on surface and groundwater, Carver CCWMO developed a Water Management Plan that was adopted in 2020. The overall goal of the Plan is to protect, preserve and manage the CCWMO's surface and groundwater systems amid rapid growth and intensive agricultural activity. The plan presents sustainable and equitable methods to reach that goal by providing guidance and specific standards for decision-makers, residents, landowners, educators, and implementing staff at the local level.

PURPOSE OF REPORT

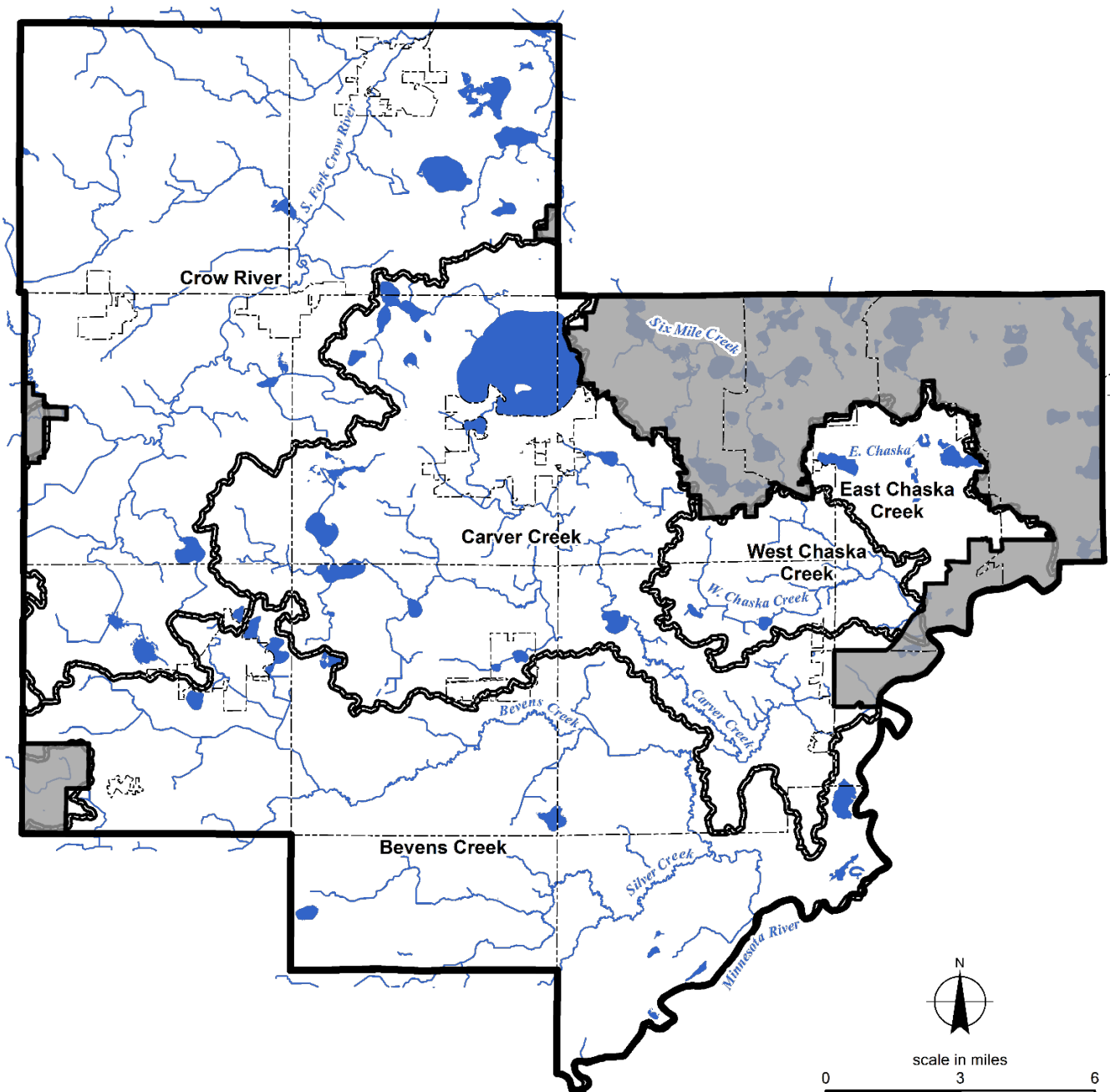
This report is intended to provide an annual look at the **activities accomplished as well as challenges encountered** by the Carver County Water Management Organization (CCWMO). This report contains information on specific WMO activities, projects, programs, planning efforts, and financial activity for **2023**. It is not intended to provide comprehensive detail on all aspects of WMO implementation. Further reports, data, and information are referenced in each section and available either via the website or on request as noted. This report fulfills the requirements of MN St. 103B.231 & MN Rules Ch. 8410.0150.

Within the Water Management Plan, there are six major program areas:

- **PERMITTING**
- **PROJECTS**
- **MONITORING**
- **EDUCATION & OUTREACH**
- **PLANNING & RESEARCH**
- **ADMINISTRATION**

This report includes a summary sheet for each of the 6 major program areas identified in the 2020 Plan. Each summary sheet contains information on short term metrics, program highlights from 2023, and links to additional information.

For more information, visit our website at <http://www.co.carver.mn.us/water>



Legend

- County Boundary
- CCWMO Boundary
- City/Township
- Major Roads
- Major Watershed
- Lakes

Watershed Boundary
CCWMO Annual Report



This map was created using Carver County's Geographic Information Systems (GIS), it is a compilation of information and data from various City, County, State, and Federal offices. This map is not a surveyed or legally recorded map and is intended to be used as a reference. Carver County is not responsible for any inaccuracies contained herein.

PERMITTING IN 2023

Permitting plays a very important role in managing and addressing water resource problems. The WMO has developed standards to protect lakes, streams, and wetlands during and after construction. The WMO also administers the state's Wetland Conservation Act within the townships in the WMO and the portion of the City of Victoria in the WMO.

WATER PERMITS



74 water permit applications reviewed



211 erosion & sediment control inspections completed



41 stormwater BMPs reviewed

WETLAND CONSERVATION ACT PERMITS



32 WCA applications reviewed

275 wetland related landowner contacts

38 WCA TEP meetings attended

0.05 acres of wetland impacted

4 new wetland violations investigated



PROGRAM HIGHLIGHTS

- 74 water permit applications were received in 2023.
- The permit review process ensured erosion and sediment control and stormwater treatment was provided for 545 acres of disturbed area and 133 acres of new impervious surfaces.

MORE INFORMATION: Additional permitting information can be accessed at www.co.carver.mn.us/water

PROJECTS IN 2023

Projects typically involve on the ground, physical improvements aimed at improving water resources. Projects may be funded by the CCWMO, through grants, or in combination with our partners. The CCWMO also operates several cost share programs including: LGU cost share, landowner cost share, well sealing cost share, SSTS direct discharge incentives.



1 landowner cost share project installed for a shoreline restoration. Total project costs were **\$694.00** with **\$520.43** reimbursed by CCWMO Levy.



4 well sealing cost share projects. Total project costs were **\$6,875**, with **\$3,900** reimbursed by CCWMO Levy.



8 water softener rebates were paid to update inefficient models. Total project costs were **\$5,671.82** with **\$2,805.91** reimbursed by CCWMO Levy.



SEE PROJECT MAP ON PAGE 10 FOR PROJECT LOCATIONS

1 WACONIA EAST FRONTAGE ROAD BIOFILTRATION BASIN

Project status: ongoing

Funding source: WMO, City of Waconia

WMO contribution: \$16,615

City contribution: \$8,308

Background: Install bioretention features between a parking lot and 8th Street E, located east of Hwy 5 and 284 intersection. The project will decrease pollutant loading from urban street runoff discharging to storm ponds located south of Waconia Ford.

2 WACONIA CEDAR POINT PARK SHORELINE STABILIZATION

Project status: ongoing

Funding source: WMO and City of Waconia

City Allocation: \$9,611

WMO contribution: \$9,611

Background: This project cleans out an existing rain garden, adds more plants, and installs a Rain Guardian to help reduce the amount of sediment reaching the basin. Also, the shoreline will be seeded with a native mix

3 WACONIA EAST FRONTAGE ROAD SUMP RETROFIT

Project status: complete

Funding source: WMO and City of Waconia

City Allocation: \$5,000

WMO contribution: \$5,000

Background: Reconstruction of East Frontage Road in the City of Waconia allowed for the installation of stormwater treatment practice. Installed BMP is a sump manhole with a SAFL Baffle that collects sediment before discharging downstream to City storm ponds.

4 BAYVIEW TURF PARKING

Project status: ongoing

Funding source: WMO and City of Waconia

WMO contribution: \$25,000

City of Waconia contribution: \$107,501.78

Background: This project changed the surface of a gravel parking lot located on Waconia School District property to turf. This change will reduce the amount of sediment discharging from the parking lot into Burandt Lake and allow for some volume uptake through evapotranspiration of plants and infiltration.

5 WATERFORD PARK POND REUSE

Project status: ongoing

Funding source: WMO and City of Waconia

WMO contribution: \$7,000

City of Waconia contribution: \$345,000

Background: A water reuse facility will be built to utilize stormwater from the Waterford Park Pond to irrigate both the park and a portion of the new residential development.

6 DOWNTOWN WACONIA DRAINAGE IMPROVEMENTS

Project status: ongoing

Funding source: WMO and City of Waconia

WMO contribution: \$10,000

City of Waconia contribution: \$451,200

Background: The project will include the construction of rain gardens, tree boxes, sump structures with SAFL Baffles, and replacing existing pavement areas with PaveDrain surfacing in the downtown area of Waconia. The project will reduce stormwater runoff sediment loading and provide water quality treatment for stormwater previously untreated draining to Lake Waconia.

7 BURANDT BLVD SUMP RETROFIT

Project status: ongoing

Funding source: WMO and City of Waconia

WMO contribution: \$9,600

City of Waconia contribution: \$9,600

Background: Project will reconstruct an existing catch basin manhole and add a sump and SAFL Baffle. This is the last structure prior to the storm sewer discharging to Carver Creek.

8 INDUSTRIAL BLVD WETLAND RESTORATION

Project status: ongoing

Funding source: WMO and City of Waconia

WMO contribution: \$25,000

City of Waconia contribution: \$130,275

Background: The project will remove sediment buildup within the wetland to restore volume and functionality of the wetland and reduce phosphorus and sediment discharging into Bent Creek. The wetland collects runoff from 26.29 acres of commercial land use. WMO funds will be used for pretreatment BMPs to reduce sediment from reaching the wetland. WMO Contributions are for pretreatment of stormwater prior to entering the wetland.

9 BENTON CREEK STABILIZATION

Project status: funded

Funding source: WMO, City of Cologne

WMO contribution: \$20,000

City of Cologne allocation: \$30,000

Background: Bank erosion at three locations along Benton Creek will be repaired using rip rap bank toe and native vegetation to establish a 15-to-20-foot buffer. The project will take three years to complete.

10 WEST CREEK STREAM RESTORATION PHASE 1&2

Project status: continuing

Funding source: WMO and Clean Water Legacy (BWSR)

Grant Allocation: \$433,000

WMO contribution: \$158,250

Background: Phase 1 of the West Chaska Creek Restoration project was completed in 2019. This work included adding 5 meander reaches and a floodplain. Construction of Phase 2 was completed in 2023 with establishment of vegetation the goal over the next two years.

11 CHASKA DEERWOOD RAVINE

Project status: funded

Funding source: WMO, City of Chaska

WMO contribution: \$30,000

City of Chaska allocation: \$120,000

Background: A six foot deep by 8 foot wide gully has formed in a rear yard drainage and utility easement in Chaska that extends 230 feet towards East Chaska Creek. This project will stabilize the ravine by regrading, installing rock checks, and revegetating ravine slopes.

12 COURTHOUSE LAKE POLLINATOR BUFFER

Project status: complete

Funding source: WMO, SWCD, Conservation Partners Legacy Grant (MnDNR)

WMO contribution: Staff Time

SWCD contribution: \$5,677

DNR allocation: \$12,430

Background: Roughly 3 acres of turf grass will be converted to a native prairie in areas next to Courthouse Lake that expands the habitat corridor along Minnesota River. Native plants will act as an additional buffer to Courthouse Lake, reducing the effects of stormwater runoff. This area also has the potential to be a critical area for the Rusty Patch Bumble Bee, an endangered bee.

13 BIG WOODS GOLDFISH REMOVAL FEASIBILITY STUDY

Project status: ongoing

Funding source: WMO and Clean Water Legacy (BWSR)

WMO contribution: \$8,000

Grant contribution: \$80,000

Background: A 3-year work plan to complete a goldfish removal feasibility study within Big Woods and Hazeltine Lakes. This would be partially accomplished by tracking, fish population surveys, and netting of goldfish.

14 CARVER PARKS TURF TO NATIVE

Project status: funded

Funding source: WMO, Carver County Parks

WMO contribution: \$25,000

Carver County Parks allocation: \$0

Background: Carver County Parks will remove maintained turf areas within two trail head facilities along the Regional Rail Corridor in Mayer and New Germany. A total of 6 acres will be restored to a native prairie.

15 BAVARIA SHORES BIOFILTRATION BASIN

Project status: complete

Funding source: WMO and the City of Chaska

WMO contribution: \$45,000

City of Chaska contribution: \$46,426

Background: The proposed improvement project includes the extension of the pipe to the bottom of the hill, installation of a catch basin with sump, the repair of the erosion, and construction of a bioretention basin to treat stormwater at the new pipe outlet, see attached plans. The basin will be sized to contain a 2-yr storm event from the approximately 5 acres of direct drainage in addition to the 0.86 acres from the cul-de-sac on Bavarian Shores Drive.

16 CHASKA CREEK STREAMBANK STABILIZATION

Project status: ongoing

Funding source: WMO and the City of Chaska

WMO contribution: \$25,000

City of Chaska contribution: \$306,800

Background: The proposed stabilization plan is to install sheet piling to protect the roadbed (future trail) and the sanitary sewer trunk line that will be constructed. Riprap will be installed on both sides of Chaska Creek and within the stream channel. A total of approximately 450 feet of streambank will be stabilized between Creek Road crossing and the private driveway.

17 BAVARIA HILLS CREEK EROSION

Project status: ongoing

Funding source: WMO and the City of Chaska

WMO contribution: \$10,100

City of Chaska contribution: \$10,100

Background: The proposed project will repair the existing erosion and to install a catch basin and storm sewer pipe to eliminate additional overland runoff to the unstable creek bank. The project will eliminate this source reaching a wetland just down stream

18 REITZ LAKE RAVINE

Project status: Complete

Funding source: Clean Water Legacy (BWSR)

WMO contribution: \$10,000

Grant allocation: \$40,000

Background: A ravine has begun to form through private land between Airport Road and Reitz Lake, adjacent to the DNR Boat Landing. This project stabilize the ravine and reduce the amount of sediment reaching Reitz Lake.

19 SOUTH FORK CROW RIVER TURF TO NATIVE

Project status: ongoing

Funding source: WMO and Clean Water Legacy (BWSR)

WMO contribution: \$10,000

Grant contribution: \$40,000

Background: Project will convert 10 acres of turf or crop land to native prairie in the South Fork Crow River Watershed District. 3 project sites have been identified that equals 12 acres of potential native prairie restoration. Costs include construction, establishment, and 3-year maintenance of the site.

20 LOWER MINNESOTA TURF TO NATIVE

Project status: ongoing

Funding source: WMO and Clean Water Legacy (BWSR)

WMO contribution: \$10,000

Grant contribution: \$40,000

Background: Project will convert 7 acres of turf or crop land to native prairie in the Lower Minnesota River Watershed. Costs include construction, establishment, and 3 year maintenance of the site.

21 BEVENS CREEK DAM REMOVAL AND STREAMBANK RESTORATION

Project status: complete

Funding source: WMO, Clean Water Legacy (BWSR), Stream Restoration Fund (DNR)

WMO contribution: \$25,000

BWSR grant contribution: \$60,505

DNR grant contribution: \$263,000

Background: A low head dam on Bevens Creek failed in 2014, causing stream bank erosion as the river went on either side of the dam. The project will restore the stream banks and add streambed grade controls as part of the removal of the failed dam.

22 WACONIA LAKESHED SWA

Project status: ongoing

Funding source: WMO, Clean Water Legacy (BWSR)

WMO contribution: \$10,000

Grant allocation: \$40,000

Background: A Subwatershed Assessment was completed by Carver SWCD for Waconia Lakeshed that identified a total of 84 projects. This grant will target the top 15 projects based upon cost benefit. If landowners of specific projects are unwilling to participate, the next project will be pursued.

23 EAGLE LAKESHED SWA

Project status: ongoing

Funding source: WMO, Clean Water Legacy (BWSR)

WMO contribution: \$10,000

Grant allocation: \$60,000

Background: This project will look at 26 possible sites across the Eagle Lake Lakeshed, with BMPs that include Conservation Tillage, CRP Buffer Strips, Rock Inlets, Grassed Waterways, and Water and Sediment Control Basins.

24 4TH STREET SAFL BAFFLE

Project status: ongoing

Funding source: WMO and the City of Norwood Young America

WMO contribution: \$7,500

City of NYA contribution: \$7,500

Background: Project will install a SAFL and sump structure on the 30" storm sewer to control the sediment and trash from entering the nearby ditch.

25 PROGRESSIVE ST SAFL BAFFLE

Project status: ongoing

Funding source: WMO

WMO contribution: \$7,500

City of NYA contribution: \$7,500

Background: Project will install a SAFL and sump structure on the 18" storm sewer to control the sediment and trash from entering Tiger Lake.

26 MULLEN BANK STABILIZATION

Project status: ongoing

Funding source: WMO and the City of Watertown

WMO contribution: \$10,000

City of Watertown contribution: \$88,015

Background: Project will provide bank stabilization improvement along the east and west banks of the Crow River through the use of selective tree removal, cedar revetments, and native plants on bank slope and top of bank.

27 WATERTOWN WWTP BIOFILTRATION BASIN

Project status: ongoing

Funding source: WMO and the City of Watertown

WMO contribution: \$10,000

City of Watertown contribution: \$81,856

Background: The proposed project will include the construction of two (2) biofiltration basins. The project is proposed in order to provide additional water quality treatment for the stormwater runoff directed to the Crow River.

28 CARVER CREEK BANK FAILURE FEASIBILITY STUDY

Project status: Complete

Funding source: WMO, Clean Water Legacy (BWSR)

WMO contribution: \$5,000

Grant allocation: \$46,991

Background: Carver Creek Bank Failure Study for a large blowout that occurred in 2012, affecting 7,500 square feet of an outside bank along Carver Creek and has increased in size to impact more than 19,000 square feet.

29 GRACE CHAIN RAVINE FEASIBILITY STUDY

Project status: ongoing

Funding source: WMO, Clean Water Legacy (BWSR)

WMO contribution: \$10,000

Grant allocation: \$60,000

Background: Chain of Lakes Ravine Study will focus on Big Woods East Ravine that has formed between Hwy 41 and the lake that may threaten the structural integrity of Co Hwy 41, and ravine systems that are affecting the Grace Chain of Lakes.

30 REITZ LAKE RAVINE FEASIBILITY STUDY

Project status: Complete

Funding source: WMO, Clean Water Legacy (BWSR)

WMO contribution: \$5,000

Grant allocation: \$25,000

Background: Reitz Lake Northwest Ravine Study focused on a large ravine system that has contributed to a 1,100 square foot delta within the lake, or roughly 3,500 cubic feet of sediment.

31 BENTON LAKE CARP FEASIBILITY STUDY

Project status: ongoing

Funding source: WMO, Clean Water Legacy (BWSR)

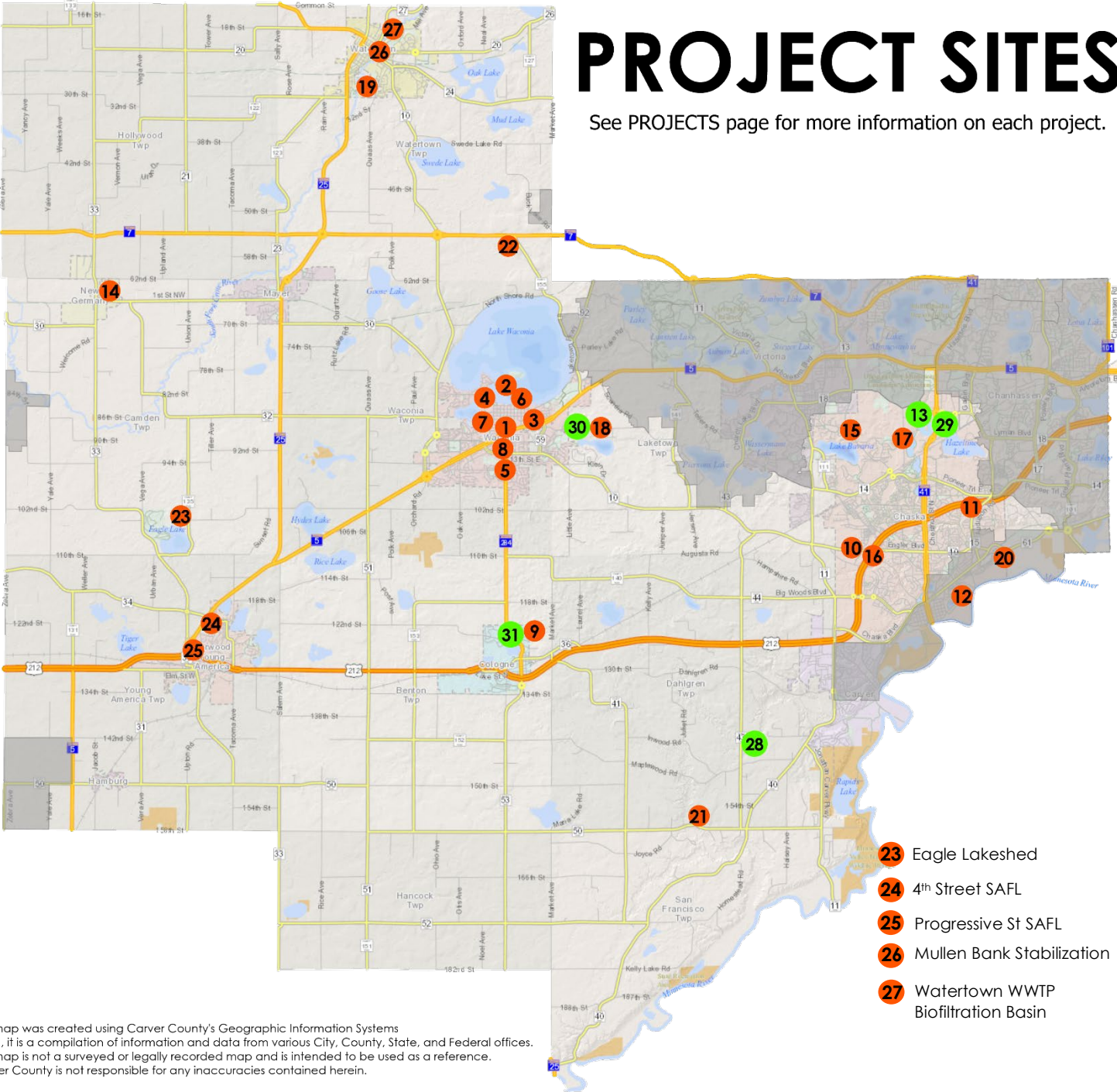
WMO contribution: \$30,000

Grant allocation: \$70,000

Background: Benton Lake Carp Reduction Feasibility Study includes a three-year work plan to assess fish populations, rearing locations, carp migrations, and fish biomass.

PROJECT SITES

See PROJECTS page for more information on each project.



- 1 Waconia East Frontage Road Biofiltration
- 2 Waconia Cedar Point Park Shoreline Stabilization
- 3 Waconia East Frontage Road Biofiltration
- 4 Bayview Turf Parking
- 5 Waterford Park Pond Reuse
- 6 Downtown Waconia Drainage Improvements
- 7 Burandt Blvd Sump Retrofit
- 8 Industrial Blvd Wetland Restoration
- 9 Lake Bavaria South Shore BMP Retrofits
- 10 West Creek Stream Restoration
- 11 Seminary Fen Ravine Stabilization
- 12 Courthouse Lake Pollinator Buffer
- 13 Big Woods Goldfish Removal Feasibility Study
- 14 Carver Park Turf to Native
- 15 Bavaria Shores Biofiltration Basin
- 16 Chaska Creek Streambank Stabilization
- 17 Bavaria Hills Creek Erosion
- 18 Reitz Lake Ravine
- 19 South Fork Crow River Turf to Native
- 20 Lower Minnesota Turf to Native
- 21 Bevens Creek Dam Removal and Streambank
- 22 Waconia Lakeshed SWA
- 23 Eagle Lakeshed
- 24 4th Street SAFL
- 25 Progressive St SAFL
- 26 Mullen Bank Stabilization
- 27 Watertown WWTP Biofiltration Basin
- 28 Carver Creek Bank Failure Feasibility Study
- 29 Grace Chain Ravine Feasibility Study
- 30 Reitz Lake Ravine Feasibility Study
- 31 Benton Lake Carp Feasibility Study

This map was created using Carver County's Geographic Information Systems (GIS), it is a compilation of information and data from various City, County, State, and Federal offices. This map is not a surveyed or legally recorded map and is intended to be used as a reference. Carver County is not responsible for any inaccuracies contained herein.

MONITORING IN 2023

The CCWMO operates an extensive monitoring program to capture the dynamic and changing nature of water resources within the watershed. The monitoring program is intended to improve the CCWMO's understanding of water resources and inform decisions about management of water resources within the CCWMO.



21 lakes sampled for nutrients and other measures of lake health

14 fish surveys

6 vegetation surveys

30 E. coli sites

20 stream chemistry sites



1 stormwater BMPs intensively monitored



108 stormwater BMPs monitored for general function



35 groundwater wells monitored

PROGRAM HIGHLIGHTS

- Continued our non-sentinel lake monitoring program with Myers and Barnes Lake receiving monitoring in 2023. Myers Lake met the state standards for total phosphorus and chlorophyll-a.
- Continued the stream fish monitoring program at 7 sites on Carver Creek. All but one site exhibited effects of a winter kill.
- Continued inlet monitoring around Lake Bavaria to determine external loads flowing into the lake. In addition, biochar was deployed at 5 inlets around Lake Bavaria to determine removal rates of nutrients and pollutants.
- Continued the lake fish monitoring program, with 7 lakes receiving trap net surveys. Barnes Lake had never been surveyed for fish before.
- Continued the lake vegetation monitoring program, with 6 lakes receiving a survey, including Myers Lake. The results of the survey calculated the highest floristic quality index score out of any CCWMO survey. Staff sampled rare species like small bladderwort and a rare stonewort species called *Nitella furcata*.
- Continued the macroinvertebrate monitoring program, with 4 sites within the CCWMO receiving a survey.
- Continued stream and watershed intensive chloride monitoring to determine chloride sources within the Brickyard, Benton, Meuwissen, and the Grace Chain watersheds.
- Initiated zooplankton monitoring on 4 lakes. The purpose of this monitoring is to determine a community baseline for zooplankton in the monitored lakes and to examine relationships between lake characteristics and zooplankton communities.
- Continued the native mussel monitoring program with 16 surveys being completed in Bevens Creek, Buffalo Creek, Carver Creek, South Fork Crow River and East and West Chaska Creek. Surveys were also completed in Piersons Lake.

MORE INFORMATION: Additional monitoring information can be accessed at www.co.carver.mn.us/water

EDUCATION & OUTREACH IN 2023

The purpose of the education and outreach program is to support the goals of the 2020 Water Plan and improve water quality. Education and outreach activities are used to increase awareness of water resources, foster stewardship of water resources, and encourage behaviors that will protect and preserve water resources.



38 educational programs and activities.



28,824 people reached through educational activities.



PROGRAM HIGHLIGHTS

- Had an interactive and well attended County Fair display with a focus on aquatic invasive species, aquatic macro-invertebrates, and stormwater ponds as urban ecology areas.
- Launched a new family education program in partnership with the MN Landscape Arboretum, Evening with the Bugs. The program educates youth and adults about aquatic macro-invertebrates, their role as indicator species, their adaptations, and role in the aquatic ecosystem.
- Hosted the 2023 Children's Water Festival in-person, returning to pre-pandemic numbers with 1800 students.
- Hosted an Earth Day celebration with the City of Chaska and Earth Day story times with Carver County Libraries focusing on the importance of trees and water.
- Gathered a Lake Bavaria stakeholder group to guide the lake management plan development and held our first meeting.
- Completed seven summer youth camps reaching 341 students on the topics of water pollution, the water cycle, native plants, aquatic invasive species, and macro-invertebrates.
- Designed a smart salt business education packet. Distributed over 27 of these packets in the cities of Carver and Watertown.
- Created 20 new education materials including postcards, social media graphics, large display signs, coloring sheets, and a new story walk for the book The Puddle Garden by Jared Rosenbaum.
- Brought an educational booth to five new events including three farmers markets and two city festivals to expand knowledge about the WMO, common water pollutants, citizen actions, and the Adopt a Drain program.

MORE INFORMATION: Additional education & outreach information can be accessed at www.co.carver.mn.us/water

PLANNING & RESEARCH IN 2023

Our planning & research program aims to further the goals of the CCWMO by:

- Researching the effectiveness of Best Management Practices.
- Evaluating how effectively we are implementing the Plan
- Measuring the effectiveness of our efforts to increase awareness and change behavior
- Conducting unique or specialized planning and feasibility studies to further the goals of the plan



1 local water plan reviewed.



2020 CCWMO Water Plan
Started project list update.



4 feasibility studies

1 feasibility study done by the CCWMO alone.

- Benton Lake Carp Feasibility Study

3 feasibility study partnerships with BWSR.

- Grace Chain Ravine Feasibility Study (Big Woods Ravine Feasibility Study is part of this larger study)
- Reitz Lake Ravine Feasibility Study
- Carver Creek Bank Failure Feasibility Study



See **PROJECTS** page for more information on each study.

ADMINISTRATION IN 2023

Proper administration of the CCWMO's fiscal and staff resources is integral to achieving the goals outlined in the 2020 Water Plan. Effective execution of the implementation strategies and activities identified in the plan requires sound fiscal management, adequate staff capacity and expertise, regular outreach and partnership with citizens and other stakeholders, and iterative planning.

ADMINISTRATIVE ACTIVITIES

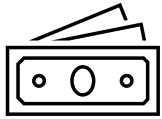
- Citizen Advisory Committee maintained, and meetings held (see page 17)
 - Meetings held with city representatives including several annual coordination meetings
 - Annual Report prepared and presented to the Citizen Advisory Committee, the County Board and BWSR
-

ANNUAL BUDGET (unaudited)

The Carver County WMO is operated as part of the County's Public Services (PS) Division. The County Board WMO budget and levy is managed as a set of programs in the PS budget allowing WMO revenues and expenses to be isolated from other Division finances. A separate levy is administered within the CCWMO boundaries (see Figure on pg 3). Funds collected from this levy support the landowner cost share program, LGU cost share program, WMO capital projects, the administration of water management rules, and portions of the operations of the SWCD, education program, monitoring program, planning functions, administration, aquatic invasive species program, and WCA programs (see summary chart below). The County is audited by through an independent auditor complying with Government Auditing Standards on an annual basis; the WMO programs, since they are a part of the County's financial system, are audited as part of this process.

CCWMO 2023 Final Budget	\$953,564
CCWMO 2023 Final Levy	\$894,064
CCWMO 2023 Fees	\$ 59,500
CCWMO 2023 Levy Impact on avg. value home (\$455,400)	\$33.31

ACTIVE GRANTS



\$1,181,044 total from **12** active grants and **2** agreements.



\$856,404.00 for stormwater BMPs, feasibility studies, creek remeander, ravine and bank stabilization, feasibility studies, and annual block grant for programs.

Source of grants: Board of Water & Soil Resources

Grant Periods; February 22, 2021 – December 31, 2024; April 27, 2021 – December 31, 2023; November 19, 2021 – December 31, 2024; February 7, 2022 – December 31, 2024; and November 17, 2022 – December 31, 2025;

\$960 for groundwater monitoring wells.

Source of grant: MN Department of Natural Resources

Grant Period: July 1, 2022 – June 30, 2023

\$3,750 for pesticide sampling in Carver County.

Source of grant: MN Department of Agriculture

Grant Period: April 1, 2023 – November 1, 2023

\$12,430 for native vegetation on buffers around Courthouse Lake.

Source of grant: DNR

Grant Period: January 30, 2020 to June 30, 2023

\$263,000 for a dam removal and creek restoration on Bevens Creek.

Source of grant: DNR

Grant Period: September 13, 2021 to June 30, 2026

AGREEMENTS

\$37,000 to conduct lake, stream and groundwater monitoring in the LMNRWD area in Chaska

Partner: Lower MN River Watershed District (LMNRWD)

Current Agreement Period: January 1, 2023 – December 31, 2027

\$7,500 to conduct MS4 required education activities within the city of Chaska.

Partners: cities of Chaska

Current Agreement Period: January 1, 2020 – December 31, 2025

ORGANIZATION

CCWMO GOVERNING BOARD – CARVER COUNTY BOARD OF COMMISSIONERS

Gayle O. Degler (District 1)

(952) 403-7047

gdegler@co.carver.mn.us

Tom Workman (District 2)

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tworkman@co.carver.mn.us

Matt Udermann (District 3)

(612) 888-4733

matt.uder mann@co.carver.mn.us

Tim Lynch (District 4)

(952) 353-2598

tlynch@co.carver.mn.us

John P. Fahey (District 5)

(612) 849-6298

jfahey@co.carver.mn.us

CCWMO PRIMARY PARTNER

Carver Soil and Water Conservation District

Mike Wanous, Mgr.

11360 Highway 212, Suite 6

Cologne, MN 55322

(952) 466-5230

CCWMO PRIMARY STAFF CONTACT

Paul Moline

Planning & Water Management

952-361-1825

pmoline@co.carver.mn.us

CONSULTANTS

MN state statute 103B.227 Subd. 5 (requires the CCWMO to seek proposals from engineering firms every 2 years). Six consulting firms were under retainer at some point during the 2023 period.

Civil Methods, LLC

Mr. David Poggi, P.E.

3109 W 50th St, #131

Minneapolis, MN 55410

(763) 210-5713

dave.poggi@civilmethods.com

EOR, Inc.

Mr. Derek Lash

Ste 300 – 1919 University Ave.

West

St Paul, MN 55104

(651) 770-8448

dlash@eorinc.com

Midwest Wetland Improvements, Inc.

Mr. Lucius Jonett

PO Box 448

Victoria, MN 55386

(952) 261-9990

lucius@midwestwetlands.com

WENCK Associates

Mr. Kenton C. Torve, P.E.

P.O. Box 249

Maple Plain, MN 55359

(763) 479-4209

ktorve@wenck.com

Stantec Inc

Mr. Kenton C. Torve, P.E.

One Carlson Parkway North, Suite

100

Plymouth, MN 55447

(763) 479-4209

kent.torve@stantec.com

Moore Engineering Inc.

Mr. Wes Boll

3315 Roosevelt Road, Suite 300

St. Cloud, MN 56301

(320) 281-5493

Wes.boll@mooreengineeringinc.com

ADVISORY COMMITTEES

Purpose

The CCWMO has two permanent advisory committees, the Citizen Advisory Committee (CAC) and the Technical Advisory Committee (TAC). Both committees are established and operated under the County's standard procedures for advisory committees. The CAC is made up of appointed citizen representatives from each of the five commissioner districts in the county and each of the four watersheds in the county. A representative of the SWCD board and a liaison from the TAC also serve on the CAC. The TAC is made up of city and township representatives. The CAC and TAC work with staff in the Planning and Water Management Department of Carver County to make recommendations to the County Board on matters relating to the CCWMO water management plan and budget; and advise staff and the County Board on environmental, waste and recycling issues. As the need arises for special projects, the County Board reserves the right to obtain additional input from stakeholders and citizens who may not be serving on the advisory committees.

CAC Membership (as of Jan 2023)

<i>Jim Boettcher</i>	<i>Citizen Rep Comm. District 1</i>
<i>Kevin Zahler</i>	<i>Citizen Rep Comm. District 2</i>
<i>Nathan Lindall</i>	<i>Citizen Rep Comm. District 3</i>
<i>Mike Lynch</i>	<i>Citizen Rep Comm. District 4</i>
<i>Lori Cox</i>	<i>Citizen Rep Comm. District 5</i>
<i>Kayla Pascoe</i>	<i>Carver Creek watershed</i>
<i>Doug Kammerer</i>	<i>Crow River/Pioneer Creek watershed</i>
<i>Mary Strother</i>	<i>Bevens Creek watershed</i>
<i>Carroll Aasen</i>	<i>East/West Chaska Creek</i>
<i>Stan Wendland</i>	<i>SWCD Board Member</i>
<i>Marcus Zbinden</i>	<i>SWCD Board Member Alternate</i>

CAC Meetings

Meeting 1 -	Tuesday, January 31 st – 6:00pm
Meeting 2 -	Thursday, February 28 th – 6:00pm
Meeting 3 -	Tuesday, March 28 th – 6:00pm
Meeting 4 -	Tuesday, April 25 th – 6:00pm
Meeting 5 -	Tuesday, May 30 th – 6:00pm
Meeting 6 -	Tuesday June 27 th – 6:00pm
Meeting 7 -	Tuesday July 25 th – 6:00pm
Meeting 8 -	Tuesday August 29 th – 5:15 pm - TOUR
Meeting 9 -	Tuesday, September 26 th – 6:00pm
Meeting 10 -	Tuesday October 31 st – 6:00pm
Meeting 11 -	Tuesday, November 28 th – 6:00pm

TAC Meetings

No meetings in 2023.



CCWMO Advisory Committee

Jan 30, 2024 Meeting

Business Item

2023 Monitoring results

Water Management Plan Related Goal

Surface Water Quality

To preserve and improve the quality of surface water resources within the watershed. The CCWMO has the following interim goals for improving water quality and aquatic life trends over the life of this plan.

Summary:

Presentation of the 2023 stream, lake, and biomonitoring monitoring results.

The Carver County Water Management Organization implements an annual stream and lake monitoring program that includes monitoring four stream systems and 21 lakes, county wide. These samples are collected to determine the overall health of Carver County stream and lake systems. Staff utilize this data to assess trends in stream and lake chemistry over historical periods, which aides in prioritizing potential projects to mitigate pollutant loading in each watershed.

Discussion Points:

- Questions about monitoring methodology, results, and trends

Recommended WMOAC Committee Action:

- No formal action required. Feedback and discussion only.



Carver County Water Management Organization Advisory Committee

Upcoming Meetings

Date	Meeting Type	Business Items
2/27/2024	Regular	Riley Purgatory Bluff Creek Watershed District TBD
3/26/2024	Regular	TBD
4/30/2024	Regular	TBD
5/28/2024	Regular	TBD

Upcoming Events

3/24/2023	Fix-it clinic 12:00pm – 4:00pm	During these events, volunteers help attendees fix a variety of items including electronics, household appliances, bicycles, clothing, and small engines. Fix-It Clinics teach valuable troubleshooting and basic repair skills. Fix-It Clinics Carver County, MN (carvercountymn.gov)
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