Carver County Water Management Organization

Citizen Advisory Committee

1. **New member introductions**
2. **Roll call**
3. **Approval of the January 30, 2024, minutes**
4. **Approval of the March 5, 2024, agenda**
5. **Business items**
   a. Riley Purgatory Bluff Creek Watershed District overview
   b. 2024 Activity Highlights
6. **Information items & project updates**
7. **Next meeting**

   March 26, 2024
8. **Adjournment**

March 5, 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**

Carver County Water Management Organization

MEETING OF THE
CARVER COUNTY WATER MANAGEMENT ORGANIZATION ADVISORY COMMITTEE
MEETING MINUTES
Tuesday January 30, 2024

COMMITTEE MEMBERS PRESENT

Attending virtually

Kevin Zahler	*Citizen representing Commissioner District 2*
Mary Strother	*Citizen, Bevens Creek*
Marcus Zbinden	*SWCD Board Representative alt*
Nathan Lindall	*Citizen representing Commissioner District 3*

Attending in person

Carroll Aasen	*Citizen, East & West Chaska Creek*
Kayla Pascoe	*Citizen, Carver Creek*
Mike Lynch	*Citizen representing Commissioner District 4*

COMMITTEE MEMBERS ABSENT

Stan Wendland	*SWCD Board Representative*
Lori Cox	*Citizen representing Commissioner District 5*
Michael Wegner	*Citizen, Crow River*
Jim Boettcher	*Citizen representing Commissioner District 1*

STAFF PRESENT

Paul Moline	*Carver County Planning & Water Mgmt.*
Madeline Seveland	*Carver County Planning & Water Mgmt.*
Andrew Edgcumbe	*Carver County Planning & Water Mgmt.*
Tim Sundby	*Carver County Planning & Water Mgmt.*
Mike Wanous	*Carver County Soil & Water Conservation District*

Meeting Minutes

The meeting was called to order at 6:03 by Paul Moline.

1) Roll call completed.

2) Nomination of Chair and Vice Chair
   Paul Moline asked for nominations for chair. Lynch nominated Carroll Aasen. Pascoe seconded. Moline asked for additional nominations or discussion. No other nominations were made. Moline presented the motion to elect Carroll Aasen as chair. Motion passed unanimously. Aasen took over the meeting as chair.

   Aasen asked for nominations for Vice Chair. Pascoe nominated herself. Lynch nominated himself. Pascoe withdrew her nomination. Aasen asked for additional nominations or discussion. No other

nominations were made. Aasen presented the motion to elect Lynch as vice chair. Motion passed unanimously.

3) Operating rules and meeting details
   Seveland explained the committee annually reviews and adopts their operating rules. She provided a quick review of the operating rules and asked the committee for any changes or edits needed. Moline added that hybrid meeting format will continue.

   Pascoe moved to accept the Water Management Organization Advisory Committee's operating rules without amendment. Lynch seconded. Motion passed unanimously.

   Moline noted that staff may return to the committee later this year with a change in meeting room location. The Carver County Board Room is updating technology and might be a better option for future meetings.

4) 2024 meeting calendar, details, and topics
   Seveland presented the 2024 meeting calendar.

   Pascoe noted that the May 28, 2024, meeting date may be of concern as it is right after Memorial Day.

   Aasen recommended the February 27, 2024, meeting date be changed so as not to conflict with caucus night.

   Pascoe moved that the February 2024 be moved to either February 20 or March 5 with priority selection of February 20 and backup date of March 5. Final date selection is dependent on when the presenter for that meeting can attend. Lindall seconded. Motion passed unanimously.

5) Approval of the November 23, 2023, meeting minutes
   Lindall moved to approve the November 23, 2023, meeting minutes. Lynch seconded. Motion passed unanimously.

6) Approval of January 30, 2024, agenda
   Pascoe moved to approve the January 30, 2024, agenda. Lynch seconded. Motion passed unanimously.

   Moline presented the potential committee meetings topics for 2024. Topics are either action items that will need a recommendation, or information items.

   Action items for 2024
   - Water Management Organization 2023 annual report
   - Water Management Organization 2024 un-allocated funding use (projects, etc.)

- Landowner cost share applications (as needed)
- Water Management Organization Plan Update (project list, priority water bodies)
- Water Management Organization 2025 levy
- Water Management Organization 2025 capital projects
- Subsurface sewage treatment systems direct discharge 2025 program
- Aquatic invasive species 2024 programing initiatives
- Aquatic invasive species 2025 program
- Watershed based initiative funding
- Input on education initiatives
- Total maximum daily load plan status and evaluation

Informational update items

- Riley Purgatory Bluff Creek Watershed District activities
- 2023 monitoring results
- Water Management Organization project status
- Water Management Organization feasibility studies results
- Annual tour
- Lake Bavaria management plan
- Benton Lake management plan
- Sub-watershed analysis results from the Carver Soil & Water Conservation District
- Education programs - seasonal
- Minnesota Department of Agriculture pesticide partnership

Lynch asked what the amount of rollover funds from 2023 to 2024 was. Moline responded that staff would not have that answer until March.

Lindall inquired if there is a list from other watershed districts or water management organizations to see what they present on, or state requirements, that the committee could view. Moline responded that the Riley Purgatory Bluff Creek Watershed District is scheduled to come to the February meeting to present on their programs. Lindall suggested that the following committee meeting be used to for follow up discussion on topic ideas and identifying what items the committee wanted brought to them. Moline responded that is the hope for that presentation. The list presented tonight is an evolving list. Moline will add a bullet point for additional updates from the state or other watershed districts.

Zahler commented that because Carver County is mostly rural countryside and farmland, we should spend more time on the issues there. He would like more education on this topic and commented that the topic of runoff specifically is important.

Lynch inquired if staff would give project updates. Moline responded yes. Lynch added that he is interested in an update on the 3-year buckthorn removal project. Moline responded that the Carver

County Water Management Organization just provided City of Chaska funds to remove buckthorn from a park and that project will be a good one to watch.

Lindall proposed that for notes from the field presentations staff could record their presentations and send them to the committee ahead of time to save staff time and meeting time. Seveland offered that there is a Carver County Water Management Organization YouTube channel that presentations could be posted to. Some of the videos could be used as public education tools. Moline responded that it is a good idea. He shared that staff do volunteer ideas and time to come to these meetings to present. Staff also create online storymaps showing project and monitoring results.

Zahler commented that the notes from the field presentations and staff interactions they provide are one of the most important sections of these meetings. He also added that many staff join the meetings even if they are not contributing.

Zahler suggested the staff reflect and decide on the use of videos. Moline says staff can discuss it and bring it back to the committee.

Lynch inquired if projects are coming in now or if that happens in spring. Moline responded that it would be more in spring. The committee saw a project update last fall. As more projects and updates come in, staff will bring them to the committee.

Zahler suggested the topic of climate change and climate change tracking be added to the topic list. He shared that more discussions would be beneficial, and we need to be doing things if the worst-case scenario occurs. Moline responded that he would place it on the list.

7) Business items

- **2023 Annual Report**

Paul Moline presented on the 2023 annual report for the Carver County Water Management Organization. The report provides a look at the activities and challenges throughout the year. This helps summarize the accomplishments of 2023. The draft of the annual report is in the packet. The annual report is a required activity and is reported to the state. No formal committee recommendation is required, but feedback is welcome before the report is released to the public.

The full report will not be available till May or June.

Moline presented on numbers and highlights for the different programs of the Water Management Organization. Below are a couple highlights from each program. The full summary can be viewed at 2023 ANNUAL REPORT (arcgis.com).

Permitting program

- 74 water permit applications were received.

- 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.

Projects

- 31 projects (not including landowner cost share projects) worked on by staff.
- 8 water softener rebates were paid to update inefficient models. Total project costs were $5,671.82 with $2,805.91 reimbursed by the water management organization levy.

Monitoring program

- 108 stormwater best management practices monitoring for general function.
- Initiated zooplankton monitoring on 4 lakes to determine a community baseline for zooplankton and examine relationships between lake characteristics and zooplankton.

Education program

- 38 different educational programs and activities provided.
- 28,824 people reached through educational activities.

Planning and Research

- Conducted 4 feasibility studies.
- Began 1 update for the county water management plan and reviewed 1 local water plan.

Administration

- Received $1,181,044 million in funding from 12 active grants and 2 agreements.
- Continued partnership agreement with Lower Minnesota River Watershed District for lake, stream, and groundwater monitoring in Chaska.

Zahler commented when reviewing annual reports, a company would talk about return on investment. He inquired what is the result from the organizations investment. Moline responded that is an excellent question. A lot of projects have very specific and local results for improvements. It is a difficult thing to have a simple answer on. Often results are listed project by project. Zahler commented that when Tim Sundby evaluates projects, he looks at results. For example, results of algae averted in water. Staff could present a larger result saying we eliminated this much of a pollutant to help improve understanding of cause and effect. Moline shared that staff could total up pollutant load reductions from all projects in a grand total. Zahler responded yes, that is a good example.

- **2023 monitoring results**

Andy Edgcumbe introduced himself as the lead water technician for the Carver County Water Management Organization. He presented the 2023 monitoring results.

Lake monitoring program overview

- Staff monitor 21 lakes.
- In 2023, staff monitored Myers Lake and Barnes Lake non-sentinel lakes.
- Lakes are classified as shallow, deep, or as trout lake. Each classification has different state standards for water quality.

Summary of lake monitoring results

- Parameters monitored on each lake.
    - Total phosphorus
    - Chlorophyll-a
    - Chloride
    - Water transparency
    - Temperature
    - Dissolved oxygen
    - pH
    - Specific conductance
    - Water level
- Total phosphorus, chlorophyll-a, and water transparency measurements are used to determine if a lake is impaired for nutrients.
- Edgcumbe shared which lakes met the state standards for the total phosphorus, chlorophyll-a, and water transparency, and which did not.

Chloride results

- For the first time, staff found lakes that exceeded the chloride state standards. Lakes Benton, Hazeltine, and Meuwissen exceeded the chronic state standard for chloride concentrations which is 230 mg/L. Meuwissen Lake is located directly north of Hwy 212. Sources of chloride are likely road salt. Meuwissen Lake then flows into Benton Lake, and Benton Lake also receives discharge from the wastewater treatment plant which has high chloride levels. Hazeltine is surrounded by industrial areas. Staff did intensive monitoring there for chloride pollution and found some hot spots including one with a 9000 mg/L chloride concentration in the sample.

Stream monitoring program overview

- Edgcumbe shared a map showing all the sites for stream monitoring.
- Staff monitor both chemistry and E. coli.
- In 2024, the program added two new sites in the Bevens Creek watershed to help isolate the influence of the wastewater treatment plant in Norwood Young America on Bevens Creek.

Summary of stream monitoring results

- Parameters monitored
    - Total phosphorus
    - Nitrate, nitrite, ammonia, total Kjeldahl nitrogen and total nitrogen

    - Total suspended solids
    - Chloride
    - Alkalinity
    - Chemical oxygen demand
    - Temperature
    - Dissolved oxygen
    - pH
    - specific conductance
    - E. coli
    - water level
- Edgcumbe reviewed details about the five parameters that have a state standard associated with them: total phosphorus, nitrate, total suspended solids, chloride, and E. coli. He shared which stream monitoring sites met the stand standards for these parameters, and which did not.

Pascoe inquired what the watershed it is that the Minnesota Department of Agriculture is working with to change the pesticide impairment. Edgcumbe responded that it is subwatershed SI2 (Silver Creek). Edgcumbe presented the idea of using similar tactics as Minnesota Department of Agriculture to work with local coops to tackle the nitrate issue in streams. Pascoe agreed and reflected on if the problem of application timing and products for nitrates is similar to that of the acetochlor impairment. Edgcumbe commented that many of the coops do not know these stream segments are impaired or that agricultural practices are the cause of the impairment, and working with them could help reduce nitrate levels in streams.

Strother inquired what the sources of nitrates are. Edgcumbe responded that sources could include an over application of nitrate in the watershed in the form of fertilizer. Strother asked if that was coming off the top of the land or through the drain tile. Edgcumbe responded that it was likely both. Strother asked about time of year. Edgcumbe responded that he could provide a better answer after he looks deeper at the data.

Strother inquired if a landowners have to identify which body of water a drain tile drains into when they install it. Mike Wanous responded that typically they do not. There is not permitting, or requirements for documenting installation, or for requirements for permission to install drain tile. However, there are some exceptions for that. The Buffalo Creek Watershed District requires a permit when the tile main is larger than 10" in diameter. This is to get better control on flood predictions and runoff numbers. Statewide there is not a requirement for reporting or getting permission for putting in drain tile, but state law does protect again the draining of wetlands. It is not just a county water management issue, but a statewide issue, and likely a national issue.

Lynch inquired when landowners apply manure to the land if they are required to stay away from standpipes. Wanous responded yes. Tile intakes have setback requirements, but for subsurface drainage which doesn't have a direct conduit, there are no setback requirements. Wanous added that staff need to look deeper at the results to see what is causing these high nitrate numbers in

these areas. It's possible there is a direct manure source getting to the surface water. Nitrates are tricky because they are soluble.

Strother inquired if it is possibly a feedlot. Wanous responded that is could be, but it could also be manure application, or a leaky waste pit. Staff need to look more at the data to pinpoint potential sources.

Strother inquired if staff can dig deeper into the data and see that it is applied. Wanous responded the Soil & Water Conservation District staff could work with the county monitoring group. Staff need to see if the current data is enough or if additional data points are needed.

Strother asked for a map showing where stream monitoring stations are in relationship to roads. Edgcumbe responded that he could send her one.

Lake biomonitoring results

Edgcumbe introduced the biomonitoring program which looks at vegetation, fish, native mussel, and zooplankton populations.

- Aquatic vegetation surveys on 4 lakes: Brand, Big Woods, Hazeltine, and Myers.
    - All lakes met the state standard for community richness.
    - Brand and Myers met the state standard for floristic quality index, but Big Woods and Hazeltine did not.
- Fishery surveys on 6 lakes: Barnes, Big Woods, Hazeltine, Miller, Rutz, and Benton.
    - Last year's record amount of snow and other winter conditions caused many fish kills including on these lakes.
- Zooplankton monitored monthly on 4 lakes: Bavaria, Benton, Hydes, and Waconia.
    - Lowest number of zooplankton was in Lake Bavaria. Highest was in Lake Benton.
    - Hydes and Benton have lower zooplankton diversity compared to Bavaria and Waconia. Waconia had the highest diversity with 14 species.
- Native mussel monitoring on Pierson Lake.
    - 667 mussels sampled.
    - 2 species found: giant floater and fatmucket.

Pascoe inquired if the low floristic score in Hazeltine and Big Wood was because of the poor water quality. Edgcumbe responded yes. He added that with lower the water levels and drought recently, staff have seen more aquatic vegetation grow because it is getting more sunlight.

Stream biomonitoring results

- Fish surveys
    - Saw evidence of fish kills on stream surveys too.
    - Site CA 1.7 in Carver Creek had the highest species richness. Sites CA 8.7 and CA 10.4 had the lowest.

    - Fish counts
        - Highest fish counts at site B1 in Bevens Creek with 176.
        - Lowest fish counts at site CA 10.4 with only 11 found.
- Native mussel surveys
    - Chaska Creek, Buffalo Creek, South Fork Crow River, and Bevens Creek.

View full results at 2023 lake and stream monitoring results for Carver County.

Strother ask to know more about the fish, mussel, and inspection populations at the dam removal site on Bevens Creek. Edgcumbe responded that it might be too soon to know the impact, but that staff did add the dam removal site on the agenda for fish surveys.

8) Information items

Seveland informed the committee that job postings for seasonal positions will open soon. The organization is hiring 1 water education intern and 3 water monitoring interns that will work both on water chemistry and aquatic invasive species, and watercraft inspectors.

Meeting adjourned at 7:46 p.m.

CCWMO Advisory Committee

March 5, 2024, Meeting

Business Item
Riley Purgatory Bluff Creek Watershed District overview
Water Management Plan Related Goal
Goal 5 - Coordination with partners. To work with partners to identify and implement efficient solutions to water resource problems.

Summary:

Terry Jeffrey, the administrator for the Riley Purgatory Bluff Creek Watershed District will present on the district's operations, programs, and initiatives. Riley Purgatory Bluff Creek Watershed District is adjacent to our Carver County WMO boundaries, operating in the northeast corner of the County in Chanhassen. Along with it's own programs, the district partners with CCWMO on many programs including education and aquatic invasive species.

Discussion Points

- Overview of district's operations, programs, and initiatives.

Recommended WMOAC Committee Action:

- Information only

Attachments

- None

Carver County Water Management Organization

CCWMO Advisory Committee

Mar 5, 2024 Meeting

Business Item
2024 Activity Highlights
Water Management Plan Related Goal
Goal 1 Surface Water Quality. To preserve and improve the quality of surface water resources within the watershed. Goal 5 Coordination with Partners. To work with partners to identify and implement efficient solutions to water resource problems.

Summary:

Staff members will present summary information on planned WMO activities, projects, programs, planning efforts, and research for 2024. Annual planning takes place every January with a goal of identifying unique or one time efforts that will inform the WMO workplan. These activities feed into the goals, objectives and tasks identified in the Planning & Water Management strategic plan.

Discussion Points:

- Questions and input on planned activities

Recommended WMOAC Committee Action:

- Information only

Attachments

- none

Carver County Water Management Organization Advisory Committee

Upcoming Meetings

Date	Meeting Type	Business Items
3/26/2024	Regular	Watershed Based Initiative Funding Summer education programming
4/30/2024	Regular	WMO 2025 Capital Improvement Project WMO 2024 Un-allocated funding use
5/28/2024	Regular	WMO 2025 Levy Lake Bavaria Management Plan update
6/25/2024		Tour

Upcoming Events

3/24/2024	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)
4/15/2024 – 4/23/2024	Earth Day story times	Carver County Water Management Organization partners with the Carver County libraries to host Earth Day story times at all 6 library branches.