



Carver County Water Management Organization

Citizen Advisory Committee

1. Approval of the April 28th, 2020 minutes and May 26th, 2020 agenda

2. Notes from the field

3. Business items

- a. Water Rules Permits & Updates
- b. 2021 Project Recommendation
- c. 2021 CCWMO Levy Recommendation
- d. Tour options

4. Information items & project updates

5. Adjournment

May 26th, 2020

Carver County Government
Center

600 East 4th St. Chaska
County Board Room

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

MEETING OF THE
CARVER COUNTY WATER MANAGEMENT ORGANIZATION ADVISORY COMMITTEE
MEETING MINUTES
Tuesday April 28th, 2020

COMMITTEE MEMBERS PRESENT

<i>Carroll Aasen</i>	<i>Citizen, East & West Chaska Creek</i>
<i>Jim Boettcher</i>	<i>Citizen representing Commissioner District 1</i>
<i>Mike Lynch</i>	<i>Citizen representing Commissioner District 4</i>
<i>Rob McKenna</i>	<i>Citizen representing Commissioner District 3</i>
<i>Stan Wendland</i>	<i>SWCD Board Representative</i>
<i>Mary Strother</i>	<i>Citizen, Bevans Creek</i>
<i>Doug Kammerer</i>	<i>Citizen, Crow River/Pioneer Creek</i>
<i>Eric Gentry</i>	<i>Citizen, Carver Creek</i>
<i>Thomas Welch</i>	<i>Citizen representing Commissioner District 2</i>
<i>Lori Cox</i>	<i>Citizen representing Commissioner District 5</i>

COMMITTEE MEMBERS ABSENT

<i>Marcus Zbinden</i>	<i>SWCD Board Member Alternate</i>
-----------------------	------------------------------------

STAFF PRESENT

<i>Paul Moline</i>	<i>Carver County Planning & Water Mgmt.</i>
<i>Madeline Seveland</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>

Meeting Minutes

The meeting was called to order at 6:00 by Carroll Aasen.

The committee has a new member, Eric Gentry, who is representing Carver Creek watershed. Gentry and committee members introduced themselves.

Cox ask two questions about the February 27th meeting minutes. First, she asked for a clarification on the proposal of the lake level item. Moline stated that staff are proposing the lake level ordinance, but it requires a public process so has been put on hold due to COVID19. Second, she inquired who the TAC listed on the 2019 annual reports was. Moline responded that the TAC is the WMO's Technical Advisory Committee. The TAC is comprised of primarily city staff and engineers. They have met twice to review the water rules changes. Staff hope to have a draft of the changes to the committee by the end of the year.

1) Approval of agenda and minutes

Lynch moved to approve the April 28th, 2020 meeting agenda with a change to meeting minutes date. Cox seconded. Motion passed unanimously.

Boettcher moved to approve the Feb. 27th, 2020 meeting minutes. Wendland seconded. Motion passed unanimously.

2) Notes from the Field

Dickhart reminded the committee of the thousands of goldfish found in the channel north of Big Woods Lake last year. He presented on the three phases of a goldfish removal project to restore the lake.

Phase 1

- Use of experimental removal technique using modified box nets.
- Tag 500 fish with a passive integrated transponder (PIT) and release them back. These transponders are like the microchips often inserted into pets and will collect movement pattern data.
- Capture 100 fish for aging.

Phase 2

- This phase is dependent on funding but would consist of installing three PIT antennas to track fish.
- Electro-fishing surveys to help tag more fish and age fish.

Phase 3

- Use trap nets later this summer or fall.
- Identify where nurseries for goldfish are located and what native fish are in the lakes.
- Use PIT data to examine goldfish movement.

Dickhart shared that staff have been in the field a lot the last few weeks. Staff have used seine nets, scoop nets, to remove over 3500 fish already.

Cox inquired how much time this process takes? Dickhart says the fish netting can be an all-day event. Sorting the fish takes the most time.

McKenna inquired if staff have noticed any other species coming through and eating the fish, such as pelicans. Dickhart said last year he remembered pelicans having 1 or 2 goldfish feasts. There are also a local population of osprey that eat them, but probably not enough to impact the population.

Boettcher inquired about social distancing and if there was a plan in place for watercraft inspections to take place. Dickhart said he knows that the Department of Natural Resources is trying to work on setting up online learning for the watercraft inspection training. Carver County has been moving

ahead as normal, hiring and onboarding employees, but we are waiting for the DNR to get that training. If the DNR doesn't open training, then watercraft inspectors can't get started by fishing opening on May 9th.

Wendland inquired if staff's goldfish collection and removal activity so far had provided any indication of how many fish are present. Dickhart responded that every time a tagged fish gets recaptured, it helps us with the population estimate. Dickhart currently is guessing the population is in the hundred thousands.

3) Business items

- **2019 Stream monitoring results**

Andy Edgcumbe provided a presentation on the 2019 stream monitoring results. Staff have three different monitoring areas for streams; chemistry, bacteria (E. coli) and bio-monitoring. Edgcumbe reviewed each area and the results.

Stream chemistry

- 14 sites monitored phosphorus, inorganic nitrogen, and total suspended solids.
- Total phosphorus is a natural occurring element but in large amounts can cause algae blooms in streams. All but two stream sites exceeded the standard for total phosphorus.
- Load measures the amount of a pollutant flowing through the stream site. 219 showed notable total phosphorus loads at sites EC 3, CC 140, and BE 9.
- Inorganic nitrogen includes both nitrates and nitrites, both which contribute to algae blooms in high amounts and can affect human and wildlife health.
- Staff used the drinking water standard to measure inorganic nitrogen because a surface water standard does not exist. All sites monitored were below the standard with SI2 being very close but still falling below.
- Notable load for 2019 in organic nitrogen happened at EC 3, CC 1, CA 10.4, and BE 9.
- Total suspended solids are suspended particles like sediment or algae that are transported by the stream. The suspended solids affect wildlife ability to feed, navigate and alter habitats.
- All sites were above the water quality standard for total suspended solids.
- Notable loads for total suspended solids were found at EC 3, SI 2, CA 10.4, and BE 9.

E. coli

- E. coli are a common bacterium found in the digestive systems of warm-blooded animals. Often used as an indicator species for water quality testing.
- High concentrations of these and other harmful bacteria can cause illness.
- All stream monitoring sites, but one, were above the water quality standard for E. coli.

10-year trends

- Staff use data from ten years of monitoring to look for trends in pollutant amounts.
- For phosphorus, one site shows improvement (CA 8.7) and one shows decline (CC 1)

- For inorganic nitrogen, three sites show improvement (CC 1, EC 1, and EC 3)
- For total suspended solids, one site shows improvement (EC 2) and one shows decline (EC 1)
- For E. coli, one site shows improvement (Bent Creek) and one site shows decline (CA 10.4)

Biomonitoring

- Using macro-invertebrates, small aquatic bugs, to determine if the stream is healthy.
- Macro-invertebrates are collected, preserved and identified. The presence or absence of specific macro-invertebrates can tell us about the stream's health.
- Edgcumbe reviewed the scores for each stream site monitored, CH 1, EC 1, EC 2, EC 3, and SI 2.
- Overall, stream sites had a "very good" diversity of species present but were low on the number of species needing good water quality to survive.

Welch inquired if the heavy rainfall last year had any noticeable impact in the total phosphorus or other related runoffs? Edgcumbe responded that a lot of the pollutant loads were higher in 2019 and 2018 for phosphorus, nitrogen and total suspended solids.

Aasen inquired at what level of E. coli concentrations they close beaches. Edgcumbe and Moline were not sure on exact numbers and said they would look into it. It can be different on different lakes.

Cox inquired what one of the macro-invertebrate scores, EPT, meant. Edgcumbe responded that it stands for the three families of aquatic bugs most sensitive to water pollution. They are Ephemeroptera, Plecoptera, and Tricoptera.

McKenna inquired what were extra sources of phosphorus. Edgcumbe responded that extra phosphorus typically comes from agricultural fields, stormwater runoff and eroding streambanks. Moline added that in the urban areas of the WMO it's typically from fallen leaves and grass clippings.

Wendland inquired how much of our phosphorus load is due to the naturally high levels of phosphorus in our soils. Moline stated that when those soils become disturbed a higher amount washes off causing an influx of phosphorus.

Edgcumbe said the 2019 data was not up on the website yet and he would work with Seveland to put it online soon.

- **Subsurface Sewage Treatment Systems**

Moline provided a background on subsurface sewage treatment systems. He explained what these systems are, and how they treat wastewater. In Carver County, we are still finding direct discharges which occur when wastewater is moved from the home to a surface water with very little or no treatment. The intent of the Subsurface Sewage Treatment System program is to remove direct discharges and replace them with functioning systems.

The program was developed in 2008 as a response to the bacteria total maximum daily load studies that were done in 2007. The studies listed direct discharges as a source of bacteria. Since the the program began there have been 398 participants.

The Crow River has also been listed as impaired for bacteria. Last year the WMO advisory committee recommended moving in the Crow River area with this septic system program.

2020 Process

- \$68,000 WMO funds are budgeted for the Crow River.
- WMO Advisory Committee recommends priority sub-watersheds.
- County Board approves annual program and priority sub-watersheds.
- County Environmental Services manages the program.

Eligibility

- Property must be in the priority sub-watershed.
- Property must have no previous trigger (i.e. current enforcement, compliance inspection as a result of property transfer, complaint, or building permit.
- County will pay cash incentive of \$2000 per SSTS.
- Loans available \$15,000 maximum.
- Landowner must install system by Sept. 30th, 2021.

Moline showed a map with sub-watersheds that have already been targeted with the program. The map shows the Crow River sub-watersheds and their E. coli counts from monitoring. He then showed another map with those E. coli numbers of those sub-watersheds just in the fall. When there are higher numbers of E. Coli in the fall, that is an indicator that E. Coli is coming from direct discharges.

Moline shared another map showing staff recommendations for 2020. Staff dedicated \$68,000 which can be used to fund about 34 systems. Moline ran through the parameters staff discuss when making recommendations for which sub-watersheds to target.

Staff are recommending targeting the following sub-watersheds for 2020.

- Smith tributary
- JD9 tributary
- Lippert tributary
- CM28 tributary
- WT31 tributary

Moline stated that these five sub-watersheds together have an estimated 38 systems. However, often once landowners have been contacted that estimated number drops and staff are expecting it to go below 35.

Welch inquired if there is a penalty. Moline responded yes, as it is illegal to have a non-compliant system. Based on state law a resident would have to move ahead with putting a system in. There has been very little push back from residents on this program and no court cases.

McKenna inquired how many total systems need to be brought into compliance beyond this year and what's already been done. Moline responded that the total for the Crow River sub-watersheds area is 217 likely systems. The program will probably continue another 5-6 years. One of the limitations with how many can be installed a year is that there are only a certain number of contractors in the county that do this type of work. Sometime, particularly wet years, projects can get backed up.

Cox inquired more about the compliance piece and the state statute. Moline responded that there is a consequence if you don't have a compliant system, you have to get one installed. The County is giving incentive money and providing a loan. If a landowner doesn't apply, then there is enforcement. Moline said that having a compliant system is a state statute and that many of the properties coming through this program don't have any triggers, so there was no way of knowing if they had a compliant system or not.

Welch made a motion to recommend the 2020 SSTS Direct Discharge priority sub-watersheds per staff recommendation to the County Board. McKenna seconded. Chair Assen called for a roll call of agreement or disagreement to the motion on the floor. All members voted yes. Motion passed unanimously.

Moline made one final note that at our May committee meeting staff will be talking about funding for the 2020-2021 program.

4) Information items and project updates

Seveland gave an update on the sustainable lawns workshop. The workshop has been moved to an online webinar format taking place on May 28th, 2020.

Seveland then provided an update on the Irrigation efficiency program taking place in Chaska this spring through summer. The program provides an instant rebate for a Rachio smart controller to help conserve drinking water and reduce runoff. You can learn more about the program at www.co.carver.mn.us/smartwater.

Moline gave an update on COVID19 and how it is affecting operations. Operations are continuing mostly uninterrupted. Most staff are working from home. Field work is still being done as most is done by one person. The education and outreach programs will have to make a number of adjustments this summer and staff are working on what new methods of outreach might look like.

Meeting adjourned at 7:41 pm.



CCWMO Advisory Committee

May 26th, 2020 Meeting

Business Item

Water Rules Permits & Updates

Water Management Plan Related Goals

- The CCWMO will continue to apply the regulatory standards described in the Water Resource Management Ordinance for erosion and sediment control, stormwater management (rate, volume, water quality), wetland protection, floodplain management, and topsoil management with the goal of preserving and improving surface water and groundwater resources and managing flood risk.
- The CCWMO will periodically review and update the Water Resource Management Ordinance. Regulatory standards will be updated in accordance with applicable Minnesota Statutes and with the involvement of cities, state agencies, and other stakeholders. When available, locally collected data will be used to evaluate the effectiveness of existing and proposed regulations.

Summary

A large part of the WMO's permitting program is governed by the Water Resource Management chapter of the Carver County ordinance ("water rules"). WMO staff are currently in the process of revising this chapter, with the intent to put new water rules into effect in 2021. This presentation will provide information on the permits that are currently issued under the water rules, as background for future discussions regarding revisions to the ordinance.

Discussion Points

Topics covered in this presentation will include:

- Permit levels under the water rules
- Permit thresholds and submittal requirements
- Example projects and summary of review outcomes
- Intro and timeline for proposed rule revisions

Recommended WMOAC Committee Action

- No formal action required. Discussion only.



Water Management Organization Advisory Committee

May 26th , 2020 Meeting

Business Item
<i>Potential projects for 2021 WMO Funding</i>
Water Management Plan Related Goal
1. Effectively and efficiently manage public capital expenditures needed to correct flooding and water quality problems;

Summary:

Staff solicited requests for 2021 WMO project funding in Jan 2020. Three projects were submitted by cities. WMO projects are proposed as well. Staff will provide an overview of these projects and is seeking a preliminary committee recommendation for the 2021 WMO project funding as part of County Board consideration of the overall 2021 WMO Budget.

Discussion Points:

- *Input on the proposed projects.*

Recommended Committee Action:

- *Preliminary recommendation on 2021 project list*

Attachments:

- *none*



Water Management Organization Advisory Committee

May 26th , 2020 Meeting

Business Item
<i>WMO 2021 Budget Recommendation - Discussion</i>
Water Management Plan Related Goal
1. Effectively and efficiently manage public capital expenditures needed to correct flooding and water quality problems;

Summary:

The WMO 2021 budget process is underway. Every year staff presents a budget recommendation to the County Board for operations and implementation of the WMO. The WMO budget process is incorporated into the County's General Tax Levy Budgeting process. As part of this process, staff seeks the recommendation of the advisory committee. The Board sets a preliminary levy for the WMO based off of this recommendation in September, and subsequently sets the final levy in December. Staff will follow up with the Committee in June for a final recommendation as there are several unknowns at this time.

Discussion Points:

- Proposed changes to the 2021 WMO budget
- Incorporation of proposed WMO project funding

Recommended WMO Advisory Committee Action:

- Input on proposed 2021 WMO budget and discussion.

Attachments:

- None (Powerpoint slides included)



CCWMO Advisory Committee

May 26th, 2020 Meeting

Business Item

2020 Annual tour

Water Management Plan Related Goals

- Protect, preserve, and manage natural surface and groundwater storage and retention systems.
- Effectively and efficiently manage public capital expenditures needed to correct flooding and water quality problems.
- Identify and plan for means to effectively protect and improve surface and groundwater quality.

Summary

Each year, the Water Management Organization's Advisory Committee attends an annual tour. The purpose of the tour is to educate the committee about upcoming projects, completed projects and projects in progress. The tour also introduces committee members to different water management techniques, topics, issues, and current research.

Due to COVID19, staff are considering different scenarios to replace the typical June tour. Ideas include the following.

- A virtual tour using video, could be pre-recorded or live
- A self-guided tour
- Postponing the tour till September

Staff will lead a discussion to gather input on how to best move forward with planning or postponing the tour and what topics and projects committee members would like to learn about.

Discussion Points

- What tour format would be the best fit for committee members?
- What tour stops would committee members like to see on this year's tour?

Recommended WMOAC Committee Action

- No formal action required. Discussion only.



Carver County Water Management Organization Advisory Committee

Upcoming Meetings

Date	Meeting Type	Business Items
6/30/2020	Regular or Tour?	Best Management Practices monitoring results 2021 WMO Levy Recommendation
7/28/2020	Regular	Board of Water & Soil Resources grant projects Stormwater reuse results
8/25/2020	Regular	
9/29/2020	Regular	

Other Events

Date	Program	Details
6/28/2020	Sustainable Lawns online workshop	In this practical webinar you'll learn everything from how to assess your current lawn, to selecting the right seed, planting, and maintaining a no-mow or pollinator lawn. You will have an opportunity to ask the presenter questions in the Q&A at the end. Register here: ninemilecreek.org/turf1/