



# Carver County Water Management Organization Citizen Advisory Committee

1. **Approval of September 27<sup>th</sup>, 2016 Agenda**
2. **Approval of May 31<sup>st</sup>, 2016 Minutes**
3. **Business Items**
  - a. CCWMO Rules Update
  - b. Aquatic Invasive Species Program Update
  - c. Microbial Source Tracking In Bevens and Carver Creek
4. **Information Items & Project Updates**
  - a. Water Management Plan Update
  - b. 20<sup>th</sup> Anniversary Event
  - c. Budget Update
  - d. Lake Benton Update
5. **Adjournment**

**Sept. 27<sup>th</sup>, 2016**

Carver County Government  
Center

600 East 4<sup>th</sup> 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 May 31<sup>st</sup>, 2016

**COMMITTEE MEMBERS PRESENT**

<i>Carroll Aasen</i>	<i>Citizen, East &amp; West Chaska Creek</i>
<i>Mary Strother</i>	<i>Citizen, Bevans Creek</i>
<i>Virgil Stender</i>	<i>Citizen representing Commissioner District 5</i>
<i>Bill Bohnen</i>	<i>SWCD Board Member</i>
<i>Thomas Welch</i>	<i>Citizen representing Commissioner District 2</i>
<i>Audrey Kramer</i>	<i>Citizen representing Commissioner District</i>
<i>Doug Kammerer</i>	<i>Citizen, Crow River/Pioneer Creek</i>
<i>Trevor Kruger</i>	<i>Citizen representing Commissioner District 4</i>
<i>Chad Robbins</i>	<i>Citizen, Carver Creek</i>
<i>Hilary Drees</i>	<i>Benton Township</i>

**COMMITTEE MEMBERS ABSENT**

<i>Vacant</i>	<i>Citizen representing Commissioner District 1</i>
<i>Brent Arentz</i>	<i>City of Norwood Young America</i>

**STAFF PRESENT**

<i>Paul Moline</i>	<i>Carver County Planning &amp; Water Mgmt.</i>
<i>Madeline Seveland</i>	<i>Carver County Planning &amp; Water Mgmt.</i>
<i>Charlie Sawdey</i>	<i>Carver County Planning &amp; Water Mgmt.</i>
<i>Mike Wanous</i>	<i>Carver County Soil and Water Conservation District</i>

**Meeting Minutes**

The meeting was called to order at 6:05p.m. by Chair Virgil Stender.

Seveland began with information items as there were IT issues that needed settling. Seveland informed the committee that the annual tour would take place on June 28<sup>th</sup> and would likely be visiting projects around Waconia and possibly up to Watertown or down to Cologne. She stated that committee members would receive an invite and agenda for the tour in the coming weeks with more information. Seveland also informed the committee that there would be not August meeting, and that instead committee members are invited to attend a NEMO (Non-point source Education for Municipal Officials) Workshop on the Water that will take them down the MN River on a barge. The tour will focus on the sediment pollution. Details will be sent to the committee later in June.

Bohnen moved to approve the May 31<sup>st</sup> agenda. Aasen seconded. Motion passed unanimously. Strother moved to approve the April 26<sup>th</sup> minutes, Robbins seconded. Motion passed unanimously.

1. Business Items

- **2017 WMO Budget**

Moline reviewed the 2017 budget. The budget categories are listed below. Moline described each category and discussed the allotted amount for 2017. Moline also reviewed which categories get reimbursed through fees (ex. engineering). Categories include;

- SWCD allocation
- Monitoring and maintenance, proposed increase of \$7,000 in 2017
- Education
- Engineering
- Projects, proposed increase of \$5000 in 2017
- AIS, proposed increase of \$50,000 in 2017
- Operations.

Moline reviewed the 2017 Capital Improvement Projects, total \$140,000, which include the following projects;

- Subsurface Sewage Treatment Systems Direct Discharge Incentive
- Waconia Community Stormwater Re-use
- Watertown Wetland Restoration
- Waconia Tree Box Filters
- Benton Lake Phase III

Moline showed a comparison to other watershed districts. Carver County WMO tax rate is lower than many of the surrounding watershed districts and water management organizations. Moline inquired if the committee had questions or comments relating to the budget. Staff would like a committee recommendation to take this to the County Board.

Kramer inquired if we are devoting enough funds to the SSTS Program to really make progress? Moline responded that we had \$50,000 budgeted or it but reduced it to \$40,000 which covers around 20 new systems. The reduction was made to fund the rest of the projects without increasing the project line item.

Kramer commented the as direct discharge is a health hazard we should allocate more funds to it. Moline responded that if the committee wants to increase those funds, we could take the \$10,000 needed from somewhere else in the budget or increase the project line item to \$150,000 (instead of \$140,000).

Welch inquired if the homeowner has to agree to the SSTS installation and if there was enough demand. Moline responded that the money would get used and yes there was enough demand. Staff try not to go over 25 systems a year because of staff time for coordinating the program.

Strother commented that she liked the idea of having staff come back to the committee and show the impact per home if the project line item is raised from \$140,000 to \$150,000. Moline responded that he can do that and inquired if there was consensus in the committee to return with those homeowner costs for \$140,000 project line item and a \$150,000 project line item.

Robbins inquired how many direct discharge systems are likely still out there. Moline responded that within Carver and Bevens Creek watersheds there are probably 50+, but we haven't even started in the Crow River watershed which will be targeted net.

Robbins commented that they may be another argument for increasing dollars to the program to show that the county has value in the program.

Moline said he would return in July with the requested numbers.

- **2015 Stream and Lake Monitoring Update**

Sawdey presented to the committee on lake and stream monitoring program. He covered why we monitor, what we monitor, reviewed what the data from the 2015 season showed and showed the online water quality monitoring tool - [https://gis.co.carver.mn.us/water\\_quality/](https://gis.co.carver.mn.us/water_quality/)

Staff monitor 18 lakes within 5 watershed and 15 stream sites within 4 different watersheds. The data is used to understand the physical and ecological health of the water, helps identify problems and issues, and where are good places to invest in projects, research and more.

Sawdey reviewed the different parameter staff monitor including phosphorus, Chlorophyll-a, Nitrogen, Secchi disc, DO, E-coli and suspended solids. Along with staff there is a volunteer monitoring program called the Citizen Assisted Monitoring Program run by the Metropolitan Council. Three of our lakes are monitored by citizen volunteers: Burandt, Reitz, and Bavaria. This year we have another volunteer that will be monitoring Swede Lake. We have been a partner in this program since 1998.

- **Water Rules Update**

Moline reviewed the proposed Water Rules with the committee and provided an update on the process. The rules apply within CCWMO boundaries on construction sites with new impervious surfaces over 1 acre and substantial grading over 5 acers. The changes for the Water Rules proposed in 2016 are as follows.

- Changing our 1.05" of water quality standard required treatment to 1".
- The state is requiring, for volume requirement, that our 0.5" that must be retained on site must be raised to 1". There are ways to get back to down 0.5" such as sites with low permeability which is most of Carver County is on tight/clay/low permeability. We are adopting the 1" rule but most sites will stay at 0.5".
- Options to provide treatment offsite.
- Sites must have 6" of topsoil. Applicants choose to meet either a site specific topsoil standard or a countywide top soils standard. They need to match what there was before development. They must manage the top soil during development and then put it back.
  - The standard has been 6 inches for many years, but there were always disagreements with develops about what constitutes top soil. New rules include a set definition and how methods to preserve.
- Must submit a top soil management plan.
- We are trying to provide more flexibility for road (linear) projects which are hard spaces to provide treatment and storage.
- Identifying between new and reconstruction. Current rules lack definition for "new impervious"
- We are adding BMPs to provide additional options for meeting requirements.

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Process and timeline: The Technical Advisory Committee began meeting last July and met 7 times between July and February. CCWMO's annual stormwater workshop was held end of February and covered the proposed water rule changes.

The County Board is set to approve the release of the draft language on June 7<sup>th</sup> and a 60 day comment period will run from mid-June to mid-August. When the public comment period closes, staff will review the comments and propose changes to the language in August. Moline asked for comments, questions and input from the committee.

Stender commented that 6 inches of top soil isn't enough, that 2 feet of top soil is where they get the water absorption. Robbins asked if these were state recommended minimums or if the County's rules could go deeper. Moline commented that it would be a tough sell and that the top soil requirement is only a part of what developers have to follow. They also have to meet other parts of the rules include the treatment of phosphorus, sediment and volume control.

Robbins commented that staff have an opportunity right now. The minimum is great but more can be done. Kramer seconded Robbins comments. Moline replied that staff haven't heard a lot of folks argue for more but he will certainly pass the comments on. Developer biggest struggle right now is how to manage and preserve the top soil and the depth may not matter.

Staff and committee agreed to revisit the rules in a year to see how it's working out.

Meeting adjourned at 8:14pm

## Water Management Organization Advisory Committee

September 27th, 2016 Meeting

<b>Business Item</b>	
<i>CCWMO Rules Update</i>	
<b>Water Management Plan Related Goal</b>	
Goal SW-1	Maintain or improve the physical, chemical, biological, and aesthetic condition of surface water resources in the CCWMO, taking into account the watershed context of each resource.

### **Summary:**

Staff will discuss the updates to the Carver County Water Management Organization (CCWMO) Water Rules which were adopted by the County Board following a Public Hearing on September 20, 2016. Staff will provide a brief summary of the changes made, information on comments received during the public comment period, a summary of the response to comments, and information on next steps.

### **Discussion Points:**

- Board adopted updated rules on September 20, 2016
- Next steps

### **Recommended WMOAC Committee Action:**

- None

### **Attachments**

Memo from the September 20<sup>th</sup>, 2016 Board Meeting



## Memo

**To: County Commissioners**  
**From: Paul Moline, Carver County Water Management**  
**Date: 9/8/2016**  
**Re: Recommended Adoption of CCWMO Rules**  
**CC. David Hemze, County Administrator**  
**Tom Vellenga, Assistant County Administrator**

Enclosures: none

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The purpose of this memo is to:

1. Brief the board on the proposed updates to the Carver County Water Management Organization (CCWMO) Rules,
2. Provide a summary of the public comment period, and
3. Describe changes made to the DRAFT Rules submitted for adoption.

### 1. Summary of Updates to Rules

The CCWMO's current ordinance was first adopted in 2001 and updated in 2006 and 2012. The County's Municipal Separate Storm Sewer System (MS4) permit, issued by the MPCA in 2013, requires specific updates to the Water Resource Management Ordinance (Rules) which are contained in these proposed changes. Other proposed changes clarify the current standards and address gaps or specific problem areas that have become apparent since the last ordinance was adopted.

To assist with the development and review of a revised ordinance, the CCWMO established a Technical Advisory Committee (TAC) consisting of technical representatives from municipalities in the watershed, state and local agencies, and CCWMO staff in July 2015. The TAC has provided review and comment throughout the ordinance revision process.

The proposed revisions encompass the following:

- Increasing the volume control requirement to 1.0 inches (currently 0.5 inches) but adding flexibility to allow volume control requirement to be reduced to 0.5 inches in certain situations
- Decreasing the water quality requirement to 1.0 inches (currently 1.05 inches)
- Adding flexibility to allow the volume control and water quality requirement to be met offsite or through banking
- Clarifying how the stormwater management portion of the rule applies to the several types of linear projects
- Clarifying the types of linear projects that are exempt from the stormwater management portion of the rule

- Clarifying topsoil management requirements
- Revising existing definitions and adding new terms
- Updating the list of best management practices eligible for volume control and water quality treatment
- Updating the Rule Guidelines and Calculator to help simplify the application process

## **2. Public Review and Comment**

At the June 7, 2016 County Board meeting, the Board authorized release of the DRAFT Rules for a 60-day public comment period. Staff sent letters to all cities and townships, sent notices to developer & engineers who have worked on a CCWMO permit since 2012, and posted the DRAFT rules on the County website and social media. Prior to the start of the public comment period, Staff reviewed the proposed changes with engineers and developers at the CCWMO Stormwater Workshop (February 26, 2016) and at a focus group meeting that focused specifically on Topsoil Management (May 12, 2016)

During the public comment period, comments were received from the following:

- Carver County Public Works Department
- Bolton & Menk on behalf of the cities of Cologne, Mayer, New Germany, NYA, Waconia, & Watertown.

## **3. Summary of Comments and Changes**

The comments received generally addressed the following areas of the Rules:

- Clarifications/request for exemptions for Linear Projects
- Clarifications to Topsoil Management section

Staff has prepared responses to all of the comments and has addressed any proposed changes in the DRAFT Rules. A set of DRAFT Rules along with the responses to public comments received is available at <http://www.co.carver.mn.us/departments/public-services/planning-water-management/water-management/permits-rules/water-rules-permits/water-rules-update-2016>. Copies are also available at the Planning & Water Management Office for review.

## **Recommendation**

With these changes, staff is recommending adoption of the proposed CCWMO Rules, and for the Rules to be enacted on October 15, 2016.



## Water Management Organization Advisory Committee

September 27<sup>th</sup>, 2016 Meeting

<b>Business Item</b>
<i>Aquatic Invasive Species (AIS) Program Update</i>
<b>Water Management Plan Related Goal</b>
1. Effectively and efficiently manage public capital expenditures needed to correct flooding and water quality problems;



### Summary:

The 2016 Aquatic Invasive Species watercraft inspection season is approaching its final month of inspections. This item will provide a general update regarding inspection statistics, Lake Minnewashta zebra mussel treatment, and forthcoming AIS stakeholder forum.

### Discussion Points:

- General Update
- Minnewashta Zebra Mussel Treatment
- Stakeholder Forum

### Recommended WMOAC Committee Action:

- Invitation for two Committee members to attend AIS Stakeholder forum 11/16/2016.

### Attachments:

## Water Management Organization Advisory Committee

September 27<sup>th</sup>, 2016 Meeting

### Business Item

#### *Microbial Source Tracking in Bevens and Carver Creeks*

### Water Management Plan Related Goal

Goal MON-1 To maintain a comprehensive, accurate assessment of surface and ground water quality trends over the long term and comply with all current and future TMDL's monitoring and assessment protocols. This data will be used to compile trend analysis, assess BMP effectiveness, and complete TMDL studies.

### Summary:

In 2014, Carver County Water Management Organization field staff collected samples in Bevens and Carver Creeks for molecular analysis to determine sources of fecal contamination in each watershed. This Microbial Source Tracking (MST) methodology utilizes distinct Deoxyribonucleic Acid (DNA) target sequences present in the bacterial genus of *Bacteroides*, an obligate fecal anaerobe, to identify the bacterium's original host. This discussion will be a primer on the methodology and how the resulting data will be utilized in future management decisions.

### Discussion Points:

- Potential sources of fecal contamination in Carver County waterways
- Mitigating fecal loading to Carver County waterways utilizing source identification

### Recommended WMOAC Committee Action:

- No action required

### Attachments:

- none



## Carver County Water Management Advisory Committee

September 27<sup>th</sup>, 2016

### Information Items & Project Updates

#### **Education Program**

- Metro Area Children's Water Festival will occur on September 28<sup>th</sup>. Five classes from Carver County will be attending.
- Madeline is presenting to World Learner School 7<sup>th</sup> and 8<sup>th</sup> graders on macro-invertebrates on September 23<sup>rd</sup>.
- The NEMO Dirt on Sediment Workshop on the Water occurred on August 31<sup>st</sup>. Attendees traveled down the MN River and learned about sources of sediment, problems with sediment and methods to reduce erosion and sediment in local areas.
- September's Water Column was on top soil and the WMO's rules changes on top soil preservation and management plans.

#### **WMO Project Updates**

##### ***Lake Burandt Reuse (Phase 2)***

*Funding source:* Clean Water Legacy (BWSR)

*Grant allocation:* \$200,000

*WMO Match:* \$50,000

*Background:* This is the second phase of the overall project of installing water reuse tanks for use by Waconia School District to irrigate adjacent ball fields. The scope of this phase is to install three water tanks, increasing holding capacity of the system to 15,900 cubic feet or roughly four nights of watering the football field. Tanks were installed and irrigation system is online and awaiting power hookup from Xcel energy.

*Update:* The school district hooked up pumping equipment in the spring the system was function in summer 2016. The City of Waconia rerouted phase II of stormwater reconstruction to the tanks.

##### ***Streambank Exclusion***

*Funding source:* Clean Water Legacy (BWSR)

*Grant allocation:* \$40,000

*WMO Match:* \$20,000

*Background:* This program will provide incentive to cattle growers to remove cattle from the riparian corridor.

*Update:* One fencing project has been installed. WMO and SWCD staff have been in contact with other potential interested landowners and more detailed plans are being drawn up. Focus will transition to Carver Creek producers once Bevens Creek options are exhausted.

### ***Carver Clean Water Initiative***

*Funding source:* Clean Water Legacy (BWSR)

*Grant allocation:* \$150,000

*WMO Match:* \$70,000

*Background:* This initiative will provide businesses and non-profit organizations (non-governmental) up to \$25,000 in cost share to install clean water projects on their property.

*Update:* Pervious pavers at Iron Taphouse and HEI collision in downtown Waconia were successfully installed benefiting the water quality of Lake Waconia. An additional site in Waconia is being discussed with landowners. A school district 112 site near lake grace has been installed.

### ***Fountain Park Stormwater Retrofit***

*Funding source:* Clean Water Partnership (MPCA)

*Grant allocation:* \$75,000

*WMO Match:* \$90,000

*City of Waconia Match:* \$25,000

*Background:* Much of the city's stormwater infrastructure is dated, and several large developed areas downtown Waconia drain directly to the lake without treatment. Of particular concern, is an 11.19 acre area that drains to the Fountain Park Pond adjacent to Waconia City Hall. During a rain event the pond is dramatically overwhelmed providing little treatment. The proposed project aims to add substantial stormwater treatment capacity to the Fountain Park area by adding a suite of BMPs that will mitigate direct suspended solid and phosphorus loading to Lake Waconia. This project is part of a larger stormwater retrofit project in this area of the city. The WMO received a Clean Water Partnership Grant from MPCA in 2014 to defray \$75,000 of the total project cost.

*Update:* Project construction is approximately 90% complete. An additional \$18,000 was received from the State which will be used for installation of tree box treatment in fall of 2016.

### ***Mayer Wetland Restoration***

*Funding source:* City of Mayer

*WMO CIP contribution:* \$50,000

*Background:* Project aims to restore a wetland area adjacent to Central Pond.

*Update:* Major work is complete. The County Board approved an extension to Dec 31, 2016 to cover the project permitting and weather delays.

***Benton Lake (Phase 2)***

*Funding source:* City of Cologne

*WMO CIP contribution:* \$55,000

*Background:* Phase I was the installation of a fish barrier at the outlet of the lake, which will virtually eliminate the possibility of carp re-establishing within Benton Lake from Carver Creek.

*Update:* Staff discussed Phase II with the WMOAC committee in March 2016. Phase II will consist of rotenone during winter conditions. An additional meeting will be held with the city on Oct 3<sup>rd</sup>, 2016.

**2016 SSTS:**

*Funding source:* WMO

*WMO contribution:* \$50,000

*Background:* This program incentivizes direct discharge SSTS systems in the Bevans/Carver creek TMDL watersheds and for first come-first serve volunteers CCWMO wide.

*Update:* The Board approved the 2016 program in April for the sub-watersheds Carver Creek W10, W12 priority and CC9 and CC11 as secondary.



## Carver County Water Management Organization Advisory Committee

### Upcoming Meetings

Date	Meeting Type	Business Items	Special Notes
<b>9/27/2016</b>	Regular	AIS Water Rules Source Tracking	
<b>10/25/2016</b>	Regular	Aquatic Invasive Species Water Management Plan	
<b>11/29/2016</b>	Regular	Aquatic Invasive Species Water Management Plan	

### Others Events

<b>10/5/16 &amp; 10/6/16</b>	Aquatic Invaders Summit	Learn how local units of government are utilizing their County AIS aid; hear about unique approaches to prevention and new research on control and management of AIS; experience new and unique communication technologies to reach boaters with AIS prevention messages.  <a href="https://www.ifound.org/community/aquatic-invasive-species/aquatic-invaders-summit/">https://www.ifound.org/community/aquatic-invasive-species/aquatic-invaders-summit/</a>	Held in St. Cloud, MN at Rivers Edge Conference Center
<b>10/18/16 &amp; 10/19/16</b>	Water Resources Conference	The Minnesota Water Resources Conference presents innovative, practical, and applied water resource engineering solutions, management techniques, and current research about Minnesota's water resources  <a href="http://cce.umn.edu/minnesota-water-resources-conference">http://cce.umn.edu/minnesota-water-resources-conference</a>	St. Paul River Center
<b>11/2/16</b>	20 <sup>th</sup> Anniversary Celebration	CCWMO is 20 years old. Come celebrate and learn about the highlights of the past 20 years. Hear from MPR's meteorologist Paul Huttner as he does the weather live from this event and talks about local challenges communities are facing with stormwater.	Schram's Vineyard in Waconia, MN