



# Carver County Water Management Organization Citizen Advisory Committee

1. **Approval of March 28<sup>th</sup>, 2017 Minutes & April 25<sup>th</sup>, 2017 agenda**
2. **Business Items**
  - a. 2018 Capitol Project Funding
  - b. Benton Lake
3. **Information Items & Project Updates**
  - a. Water Management Plan Update
  - b. June Tour
  - c. May meeting date discussion
4. **Adjournment**

**April 25<sup>th</sup>, 2017**

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 March 28<sup>th</sup>, 2017

**COMMITTEE MEMBERS PRESENT**

<i>Carroll Aasen</i>	<i>Citizen, East &amp; West Chaska Creek</i>
<i>Mary Strother</i>	<i>Citizen, Bevens Creek</i>
<i>Virgil Stender</i>	<i>Citizen representing Commissioner District 5</i>
<i>Stan Wendland</i>	<i>SWCD Board Member</i>
<i>Doug Kammerer</i>	<i>Citizen, Crow River/Pioneer Creek</i>
<i>Audrey Kramer</i>	<i>Citizen representing Commissioner District</i>
<i>Trevor Kruger</i>	<i>Citizen representing Commissioner District 4</i>

**COMMITTEE MEMBERS ABSENT**

<i>Vacant</i>	<i>Citizen representing Commissioner District 1</i>
<i>Chad Robbins</i>	<i>Citizen, Carver Creek</i>
<i>Thomas Welch</i>	<i>Citizen representing Commissioner District 2</i>

**STAFF PRESENT**

<i>Madeline Seveland</i>	<i>Carver County Planning &amp; Water Mgmt.</i>
<i>Tim Sundby</i>	<i>Carver County Planning &amp; Water Mgmt.</i>
<i>Charlie Sawdey</i>	<i>Carver County Planning &amp; Water Mgmt.</i>
<i>Andrew Edgcumbe</i>	<i>Carver County Planning &amp; Water Mgmt.</i>
<i>Mike Wanous</i>	<i>Carver Soil &amp; Water Conservation District</i>

**Meeting Minutes**

The meeting was called to order at 6:03p.m. by Chair Stender. Stender inquired if there were any changes to the agenda or minutes.

Aasen moved to approve February 28<sup>th</sup>, 2017 minutes and March 28<sup>th</sup>, 2017 agenda. Kammerer seconded. Motion passed unanimously.

1. Business Items

• **Lake and Stream Monitoring Summary**

Edgcumbe presented stream and lake monitoring data collected in 2016. Staff monitored

- 15 stream chemistry sties
- 10 stream e. coli sites
- 19 lakes sites

Edgcumbe used stream monitoring story maps to run through the results of the water quality monitoring in each sub-watershed.

- Most stream sites in all sub-watersheds exceeded totally phosphorus standards.
- For inorganic nitrogen, 3 sites had a downward trend and 2 had an upward trend.

- Most sites fall at or over standards for total suspended solids. There was a downward trend for total suspended solids at three sites.
- For E. coli, 9 sites are above standards.

Wendland inquired if any of these sites were with the SSTS program areas and if there was a way to see if upgrading the septic systems had been effective. Sawdey responded that yes the sites were within that program area. Currently, there are not trends right now but E. coli can be tricky because a) it's an indicator species so really high numbers don't always mean increased risk for humans and b) it can grow in sediments so it's presence doesn't always mean there's an external source. Staff recently completed genetic testing for water samples to determine if bacteria found were human or animal. The results of that were presented to the committee fall 2016.

Kramer inquired if Bevens Creek was or had been targeted for the SSTS incentive program. Sawdey said that yes it was the first one targeted and that in 2017 the sub-watershed targeted are in Carver Creek watershed and East Chaska Creek watershed.

Edgcumbe continued reviewing monitoring story maps for lake monitoring data

- Most lakes are above standards for total phosphorus concentrations. Only Waconia and Bavaria are not.
- Five lakes have a downward trend in phosphorus concentrations (Swede, Reitz, Miller, Benton and Hazeltine). Eagle Lake is increasing.
- Most lakes are above the standard for chlorophyll-a (measure of algae). Swede, Bavaria, Jonathon and Grace all have increasing trends in chlorophyll -a.
- Other than Waconia and Reitz, all other lakes are below (do not meet) the water quality standard for transparency, measure through secchi depth.

Wendland inquired if the eco-systems norms were different than water quality standards and if you could have a fairly mucky lake that was in the normal range depending on which eco-system it fell into. Edgcumbe replied that yes you could and yes the eco-system ranges were different than water quality standards.

Wendland inquired if the eco-system range was based on vegetation or soils types? Sawdey responded that it was based upon both. Staff had previously commented to state agencies that parts of Carver County shouldn't be considered part of the norther eco region, but the corn belt eco-region instead. Sundby commented that the corn belt region is just west of the county. The proposal change was not adopted.

Kramer inquired what staff are doing about the chlorophyll and phosphorus problems and if there was funds to educate citizens around the lake. Seveland stated that it had been a while since CCWMO staff targeted lakeshore owners with mailings or specific programs and we could look at doing it again.

- **Annual Report Review**

Seveland presented on the CCWMO's annual report which measure

Kramer inquired on the expansion of groundwater monitoring. Sawdey explained that staff assist with monitoring Department of Natural Resource wells and staff also expanded the number of wells monitoring at Seminary Fen.

Kramer inquired about the status of the wells and water levels. The status is mostly determined by the Metropolitan Council and MN Department of Natural Resources who do the analysis. DNR keeps the long term trends of aquifers. He offered to forward Kramer a groundwater plan report that show more of the information which she was seeking.

Kramer inquired if we'd lost aquifers other places like Chanhassen did. Sawdey responded, we haven't lost aquifers but he Metropolitan Council has expressed concern with water supply in some areas. The aquifers lost in Chanhassen were likely shallow aquifers, not deep.

Strother inquired about the Benton Lake rotenone project. Sawdey responded that there is still money allocated to the project, but no one bid on actually doing the project. Staff are considering how to restructure their request for proposal to gain more bids. The goal is to have an immediate turn around as many county and city staff and citizens are involved and there is a lot of momentum.

Kruger inquired if the Arboretum is still doing the composting study. Sawdey responded that yes they are and there is another site in Norwood Young America. Both have wells they monitoring for chemistry to determine if composting sites are impacting groundwater quality.

Kramer inquired about the status of the streambank exclusion grant. Sawdey responded that he will be sending out letters soon to targeted landowners.

- **Project Fact Sheets**

Seveland informed the committee that staff will be designing and creating project fact sheets. The purpose of these sheets is to inform the general public, local decision makers, and partners of basic project information. Seveland showed the committee a couple examples of fact sheets from other organization and asked the committee 1) who they thought the audience of these fact sheets might be and 2) what information should be included on them?.

Wendland inquired if there were privacy law restrictions with cost share disclosure. Wanous stated there are ways to address that by having owners sign waivers or other documents when they receive cost share.

The committee though the following items would be useful to include on the fact sheets.

- Benefits for project, loading on surface water
- Costs
- How long the project is expected to last, life cycle
- Before and after photos
- Aerial views showing how many acres are affected by the project, scale of impact.

The committee also felt that these new tools could be used to market additional projects and partnerships.

- **Reuse Roundtable Results**

Sundby gave a background on our water rules and developers responsibilities relating to capturing and treating stormwater runoff on sites. They are responsible for treating both water quality and stormwater volume. Stormwater reuse is one of the best management practices used to meet volume reduction.

There has been an increase in the number of developers using reuse to meet CCWMO's water rules. It helps reduce the footprint of practices needed to meet the water rules and is feasible because most sites have a pond and desire more green space.

Aside from reducing stormwater runoff other benefits include that reuse systems reduce demand for potable water sources (thus saving groundwater in Carver County) and can save money over time.

Sundby reviewed what was required of developers to include reuse systems as a best management practices for stormwater. All proposed projects are reviewed by staff that look at the amount of storage proposed, pump site, irrigation area and irrigation rate, etc.

Wendland inquired how much the success of the project depends on day to day management. Sundby responded that most systems were automated by a control panel, so little. Staff is developing a one page operation guide on how to run the systems as many will be taken over by HOAs and we want them to be successful.

Wendland inquired if someone does checks. Sundby responded that yes, staff monitor twice a month. Staff monitor for systems for both compliance (operated as permitted) and system operations ( long term and spot checks). Long term is three site visits a year by CCWMO staff.

Aasen inquired if operates could run the system manually. Sundby responded that yes they can be operated manually to respond to weather changes.

Sundby reviewed what staff have observed in the last year. Over 2.8 million gallons were utilized over 5 sites. Those systems resulted in approximately 5.52 lbs. of phosphorus and 1,900 lbs. of sediment prevent from getting into lakes and streams. Additionally, about \$9,000 saving in water costs.

Staff held a reuse roundtable forum with engineers, developers, irrigation designers and installers and end users. The goals were to update and improve CCWMO guidelines, improve plan set submittals and bridging gaps in language and communication between stakeholders.

The main "take aways" from the forum include.

- Attendees wanted more Operation and maintenance plans and one page summaries.

- There is a breakdown between approval process and operator system due to lack of communication and different languages used.
- Attendees said there needed to be more education to HOA's and property owners on the systems.

Going forward staff plan to update O& M plan, provide templates and education materials.

Wendland inquired if this was an answer to the problems with compaction and lack of infiltration found in some stormwater ponds. Sundby responded that it is another option and there aren't many options for infiltration in Carver County due to clay soils. This is another tool that a developer can use to maximize their site and get more for the area they bought.

## 2. Information Items

- **Education**

Seveland informed residents if they had ideas for her monthly water columns in the newspapers to e-mail or call her. She also stated she has contacted residents from Woodbury Townhome Association on Lake Burandt in hopes of building a relationship with the organization that lead to some actions and projects to protect the lake.

- **Project Updates**

Sawdey updated the committee on projects.

- He is sending out targeting letters to landowners for participation in the Streambank Exclusion program.
- More pervious pavers are getting installed at In Town Marina as part of the Carver Clean Water Initiative and staff has 3-4 more projects they are considering for the remainder of the funding.
- The Fountain Park is mostly complete. A tree box will be installed this spring.
  - o The Mayer wetland restoration is still on course for vegetation to be installed this spring
  - o Benton Lake phase two was commented on earlier
    - Staff will be pursuing a barrier between Benton and Meuwissen Lake to cut off carp traffic between those two bodies of water.
  - o Staff is in contact with property owners for the 2017 SSTS. There is also a low interest loan for people needing a new septic system. Homeowners outside the targeted sub-watershed can apply for these loans.

Meeting adjourned at 7:47pm.

## Water Management Organization Advisory Committee

April 25<sup>th</sup>, 2016 Meeting

<b>Business Item</b>
<i>Potential projects for 2017 WMO Funding</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:**

Staff solicited requests for 2018 WMO project funding in Jan 2017. Four projects were submitted by cities, and staff is proposing projects as well (from the Water Management Plan or current potential partnerships). Staff will provide an overview of these projects and is seeking committee input prior to finalizing the projects. In May, Staff will present a recommendation for final 2018 WMO project funding as part of County Board consideration of the overall 2018 WMO Budget.

### **Discussion Points:**

- *Input on the proposed projects.*

### **Recommended WENR Committee Action:**

- *Recommendation on 2018 project list*

### **Attachments:**

- *Recommended project list memo .*



## Memo

**Date:** April 25, 2017  
**To:** WMO Advisory Committee members  
**From:** Paul Moline, CCWMO  
**Re:** WMO Project Funding 2018 – Draft Recommendation  
cc.

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Staff has compiled a list of requested projects for 2018 CCWMO funding totaling \$276,732. **Staff is recommending the following draft project list for an amount of \$177,575.** A final recommended list will be brought to the committee in May along with the 2018 WMO Levy request and is based on the following factors/considerations:

- The CCWMO evaluation process which ranks projects based on a series of criteria.
- Requests for project funding through the solicitation process.
- Projects identified in the CCWMO plan.
- Funds committed to matching grant agreements.

### **1. City of Waconia 10<sup>th</sup> Street Pond** **Recommended \$28,520**

Application for funds from the City of Waconia to install a bioretention basin adjacent to the regional stormwater reuse pond to provide water quality treatment when reuse system is not in use.. The pond also collects water from a large portion of urban area which is currently untreated. **The City is requesting \$57,040** in CCWMO funding as match to city funding. Total project costs are estimated at \$114,080. Staff recommends funding 75% of the project request since 25% is collecting runoff from redevelopment. Policy has typically been not to fund areas that need to comply with WMO standards.

### **2. SSTS Direct Discharge** **Recommended \$60,000**

SSTS Direct Discharge Cost Share is an incentive based program to eliminate direct discharge SSTSs in the Bevens and Carver Creek Watersheds. This program has been in place for the past nine years and targets specific subwatersheds as identified by CCWMO Staff and the WMO Advisory committee. It is also available for first come first serve volunteers in the greater CCWMO area. The committee recommended at the February 2017 meeting, that the amount of incentive **be increased to \$90,000 or more.** Due to an uncertainty in the time available by designers and contractors, staff is recommending an amount of \$60,000 that will help fund incentives for up to 30 separate SSTS installations.

### **3. West Creek Stream Restoration and Remeander** **Recommended \$50,000**

An opportunity has been presented to restore a straightened (ditch) section of West Chaska Creek in the City of Chaska. As part of a private development parcel near Hwy 10 and Hwy 212, the WMO and City have proposed to remeander an 800' stretch of the Creek which would re-introduce more bends, riffles and pools into the stream channel. Lengthening this channel will also allow for slower movement of sediment and, along with restoration of the banks and a 50' buffer, create a more natural channel. Partners include the City of Chaska and potentially the Lower MN Watershed District. Staff is proposing to allocate \$50,000 towards this project with a total project cost exceeding \$100,000.

**4. City of Waconia Waconia Burandt Channel Restoration** **Recommended \$13,055**

Application for funds from the City of Waconia to install native vegetation (trees, shrubs, perennials, and short sedge meadow mix) on the outlet channel to stabilize banks and return channel to a natural look. The project will decrease pollutant loading to Burandt Lake Bent Creek which is listed as impaired. **The City is requesting \$13,555** and staff recommend providing full funding for 2018. Total project costs are estimated at \$26,110.

**5. City of Cologne Conrad St Retrofit** **Recommended \$6,000**

Application for funds from the City of Cologne to install an infiltration basin and sump manhole with baffle to provide water quality treatment and volume reduction for an area with no current treatment measures. The retrofit will reduce phosphorus loading by 40% and the sediment loading by 20%. **The City is requesting \$6,000** and staff recommend providing full funding for 2018. Total project costs are estimated at \$9,000.

**6. Benton Lake Restoration Phase III** **Recommended \$20,000**

Phase III of Benton Lake Restoration is the application of rotenone, installation of a rough fish barrier between lakes Meuwissen and Benton, and reestablishment of a healthy fish community to Benton Lake. 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. Phase II resulted in a feasibility study to drawdown the lake. Previously allocated funds of approx.. \$35,000 are available with a need for additional funding for Phase III to total \$55,000.

**7. City of Norwood Young America Stormwater Retrofits** **Recommended \$0**

Application for funds from the City of Norwood Young America to install 2 SAFL baffles in existing infrastructure. The request includes installing a large catch basin structure to accomodate the SAFL's. The structures would reduce street runoff pollutant loads which currently flow to a stormwater pond. The WMO funded two structures in 2017 in another part of the city. **The City is requesting \$40,637.** Staff is proposing to not fund this project due to the fact that the flows are from recently built streets (2004) and are directed to a stormwater pond so this area is considered to have some stormwater treatment already. WMO funds are better used in priority un-treated areas.

**8. CCWMO Project Maintenance Fund** **Recommended \$5,000**

Several previously installed CCWMO projects need ongoing maintenance and potential repair. Staff is proposing to continue building this fund in 2017.

## Water Management Organization Advisory Committee

April 25<sup>th</sup>, 2017 Meeting

<b>Business Item</b>	
<b><i>Benton Lake</i></b>	
<b>Water Management Plan Related Goal</b>	
WMP -1:	Identify and plan for means to effectively protect and improve surface and groundwater quality;
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:**

Phase I of Benton Lake Restoration 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. Phase II has included working on a technical report to look at the feasibility of a lake drawdown, and associated impacts. Staff proposed a lake rotenone (fish toxicant) treatment to the system last winter, but were unsuccessful in finding an applicator willing to do the work. This discussion will serve as an update to the committee, and staff will provide a new proposal to CCWMOAC for recommendation.

### **Discussion Points:**

- Project Timeline
- Project Methodology
- Stakeholder Process

### **Recommended WENR Committee Action:**

- Provide recommendation to move ahead with rough fish control measures.

### **Attachments:**

- None



## Carver County Water Management Advisory Committee

April 25<sup>th</sup>, 2017

### Information Items & Project Updates

#### **Education Program**

- Letters sent to Woodbury Townhome residents inviting them to come about and discuss Burandt Lake. Only one reply thus far.
- May water column on well sealing. June water column on aquatic invasive species decontamination unit.
- City Local Water Management Plan partnerships with distributing water education are underway. Monthly e-mails are sent to cities with social media posts, online news posts, articles and other media to disseminate via their local information channels.

#### **WMO Project Updates**

##### ***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. Further, stream restoration sites are being assessed for program inclusion.

##### ***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:* Three projects completed last year (Iron Taphouse, HEI collision in downtown Waconia and the Kindergarten Center). The In-Towne marina site is in construction this spring and up to three additional sites are in the planning phase for 2017.

### ***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 spring of 2017.

### ***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. Vegetation will be planted in spring of 2017.

### ***Watertown Wetland Restoration***

*Funding source:* City of Watertown

*WMO CIP contribution:* \$50,000

*Background:* Project aims to restore a wetland area south of the City of Watertown east of County Rd 10.

*Update:* Partnership project with the City of Watertown and County Public Works. Planning and permitting work continue with construction potentially happening in fall 2017.

### ***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:* An RFQ was sent to treat Benton Lake with Rotenone February of 2017. The WMO did not receive any quotes from aquatic pesticide applicators to conduct the treatment. They cited lake dynamics and lack of technical experience pertaining to winter rotenone application as primary reasons to not pursue the project.

*Update:* WMO staff is currently working to pursue a fall 2017 application of rotenone.

## **SSTS:**

*Funding source:* WMO

*WMO contribution:* \$50,000

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

*2016 Funds Update:* The Board approved the 2016 program in April for the sub-watersheds Carver Creek W10, W12 priority and CC9 and CC11 as secondary. Many of the systems were not installed due to the record wet year and have been delayed to 2017.

*2017 Funds Update:* The Committee recommended primary sub-watersheds of CC9 and CC11 and CR 19. The secondary sub-watershed is the portion of CA10-4 in Benton and Dahlgren Townships. Carver Creek in February and those are awaiting Board approval.



## Carver County Water Management Organization Advisory Committee

### Upcoming Meetings

Date	Meeting Type	Business Items	Special Notes
<b>3/28/2017</b>	Regular	<ul style="list-style-type: none"> <li>- Projects update</li> <li>- WMO annual report</li> <li>- Project fact sheet</li> <li>- Lake &amp; stream monitoring results</li> <li>- Reuse Roundtable results</li> </ul>	
<b>4/25/2017</b>	Regular	<ul style="list-style-type: none"> <li>- Water Management Plan update</li> <li>- June tour discussion</li> <li>- WMO 2018 capital project funding</li> <li>- WMP update and issues</li> </ul>	

### Others Events

Date	Program	Description	Special Notes
<b>Ongoing till May 4<sup>th</sup></b>	Rain barrel sale	You can purchase a rain barrel through <a href="http://RecycleMinnesota.org">RecycleMinnesota.org</a> and pick it up on May 5 <sup>th</sup> or May 6 <sup>th</sup> at Riley Purgatory Bluff Creek Watershed District's office.	