

**CARNELIAN-MARINE-ST. CROIX WATERSHED DISTRICT**  
**Regular Meeting Minutes March 22, 2017**

**Managers Present:** Kristin Tuenge, Joel Stedman, Wade Johnson, Dave De Vault, and Eric Lindberg

**Managers Absent:** Tom Polasik and Andy Weaver

**Others Present:** Jim Shaver (administrator), Susannah Torseth (Lawson Law), Meghan Funke (EOR), Bill Voedisch (May Township), Fran Miron and Dan MacSwain (Washington County), Suzanne Lindgren (*Country Messenger*) and Debbie Meister (MMC)

Manager Tuenge called the meeting to order at 6:43 p.m.

**1) Approve Agenda**

**The motion was made, seconded and passed to approve the agenda as presented.**

**2) Public Comments**

There were no public comments.

**3) Workshop Discussion - Square Lake Trout Moratorium**

Dr. Funke summarized the science behind the conclusion that water clarity and *Daphnia* populations improved and 100% of the moratorium criteria were met with the stocking moratorium. During the moratorium, Dr. Hembre of Hamline University monitored clarity, algae and *Daphnia* populations. The results were reviewed and concurred by EOR, Minnesota Department of Natural Resources (DNR) and Dr. Zimmer of University of St. Thomas.

At the March 8 Board meeting, T.J. DeBates (DNR) cited a 2005 research article on the effects of spring trout stocking on water clarity in Long Lake as support for a proposed three-year spring trout stocking in Square Lake. Dr. Funke compared the original 1996-1999 Long Lake study, also conducted by Dr. Hembre, with the 2003-2005 Square Lake LCMR study. Key differences included: Long Lake is deeper and has more volume, providing a larger refuge area for *Daphnia*. The spring stocking only manipulation in Long Lake occurred over two years compared to just one in Square. In Square Lake, the predator-prey linkage between rainbow trout and *Daphnia* is weaker and the food web more complex compared to Long. Rainbow trout are the primary predators of *Daphnia* in Square Lake, while in Long Lake other sources of *Daphnia* mortality were often more important than trout-induced mortality. Trout are able to survive in Long Lake, but not in Square.

Question and Comments:

- Dr. Funke responded that she and Dr. Hembre are not sure if the Long Lake study is a good predictor of results of a spring only trout stocking in Square Lake. There are other factors that affect trout and clarity and lakes will be different.
- Mr. Voedisch stated that just looking at the data from the Square Lake moratorium study, everything improved. Because the trout do not survive over the winter in Square, the trout

being caught are small, not trophy size and with a spring only stocking will not be present in the fall. This was discussed with DNR, but DNR got requests from fishermen. Up north trout don't reproduce, but they live and you can catch large fish. As far back as 1997, we talked about Square Lake water clarity and the trout-*Daphnia*-clarity issue. We asked for a stocking moratorium back then to see what would happen. DNR's position was we need science before we can stop stocking. But what science did they have for stocking? Over the past four years with these studies, you learned a ton. Square Lake has the reputation as being the cleanest lake in the Metro. It isn't so clear, but I would like to see it become clear again. I love trout fishing, but this is not the right lake. We have two opposing interests: clarity versus fisheries.

- Manager Tuenge stated that historically we have undermined our ecology for the benefit of a few. We have drawn a huge number of residents with our meetings. Residents are fully invested. We are the stewards, but DNR is the decider.
- Administrator Shaver stated that collectively, the District, Marine Watershed Management Organization (now part of CMSCWD) and state agencies have invested just short of \$250,000 in studies to get an answer. We feel we have an answer.
- Commissioner Miron stated that he and Dan McSwain have met and talked about this. Clarity is one issue, but there are others. Mr. McSwain added that he asked Mr. DeBates (DNR) what are the risks to other species with stocking. For example Christmas Lake, a trout stocked lake, has zebra mussels. The County wants to protect Square Lake. The County and others have made investments in the lake and park. The boat launch is limited and is already at capacity, to a certain extent. We have a lot of use already on the lake.
- Manager De Vault stated that he thinks spring stocking will not work and we will have the same problem as in the past. He supported what Dr. Funke said regarding pre and post moratorium. That is lake ecology 101. It is a top down effect on water quality. As former staff at the Environmental Protection Agency, we saw the same results on the Great Lakes. Water quality is what we want to do as a Board. DNR fisheries is funded by licenses.

**Manager Tuenge moved to request Minnesota Department of Natural Resources permanently cease stocking trout in Square Lake for the benefit of water quality and based on the findings of the 2013-2015 moratorium monitoring. Seconded by Manager De Vault.**

Discussion:

- Mr. Voedisch recommended drafting a resolution of findings to support the motion and to send it with a cover letter to whomever you think is important.
- Manager Lindberg stated that fisheries wants to have Square Lake because it is a gem. It is cold and is the only area lake that can support trout. But since the March 8 meeting, he concluded it is not worth this sacrifice. DNR does not have any options for stocking. But for the environment and for what we are tasked to do, it is not worth it. It is a nonnative fish.
- Manager Stedman also stated that at the March 8 meeting, the Board heard from all interests—residents, fishers, DNR—and heard about the science. He was not prepared at that meeting to make a decision. But it has been two weeks and with the information

tonight, he is very comfortable. The water quality and clarity is the highest resource. With the study, the results are clear.

- Manager Johnson stated that the District is doing science-based management. There are many voices for the moratorium versus a very few fishers. It is a managerial decision. He also noted that the motion is renewing the resolution from the June 8 meeting.

**Motion carried 5-0.**

It was agreed that Administrator Shaver and Attorney Torseth will draft a resolution to be shared with Mr. Voedisch, Commissioner Miron and the Square Lake Homeowners Association, and hopefully, adopted by May, Washington County and the lake association. Additionally, Administrator Shaver will let Mr. DeBates know the District supports a permanent stocking moratorium. Commissioner Miron recommended sending the letter, with the resolution and motion, to DNR Department of Fisheries because this is where the issue originated. Others can be copied. All agreed that working together and having a unified voice will make this effort successful.

**4) Project Updates**

**a) Log House Landing Ramp**

Administrator Shaver reported that the meeting is now the first or second week in April to look long-term at what residents want for the park and ramp. He recommended the District not be a leader, but just listen. Manager De Vault agreed and said Scandia needs to decide what they want to do. It is a land use issue.

**b) Marine Stormwater**

Administrator Shaver reported that the County bid, with the District's projects, should be back on April 11.

**c) Sand Lake Implementation**

Administrator Shaver reported that there is a problem with the iron-enhanced sand filter related to frost movement opening up a water bi-pass. The system is under warranty and the contractor is making improvements that if done correctly will fix the problem.

**d) Long/Terrapin AIS**

Administrator Shaver reported that the District received a county grant to help with aquatic invasive species (AIS) in Long and Terrapin lakes. He and Mr. Almer are reviewing three locations for placement of screens to prevent AIS moving from Long into Terrapin.

**5) New Business**

**a) Buffer Law Enforcement**

Administrator Shaver reported that watershed districts in the state have the option to either assume the responsibilities to enforce the law or defer those responsibilities to counties. He stated that he does not think there are many areas in the district where the law will apply and there is nothing in the budget or staff time for enforcement. Angela Defenbaugh (WCD) would like to know the District's enforcement decision so she can

better coordinate the Buffer Law. Commissioner Miron stated that if the county does not undertake enforcement, it will fall to BWSR. There is some legislative funding for counties for enforcement, but Washington County needs to hear specifics, have a discussion with the County attorney and Board. He stated that he is a strong believer to keep it local so the County can advocate and serve its citizens.

Discussion:

- Although BWSR asked districts for a preliminary decision, Manager De Vault stated that he would like to postpone the decision to see what the county does. He stated that he leans toward keeping it local and not passing it on, if the county declines.
- Commission Miron clarified that according to Jay Riggs (WCD), conservation districts were not offered enforcement responsibility and most agriculture lands within the county are in compliance. In the south, there are some areas with dry-washes running through irrigated fields.
- Manager Tuenge stated that the governor has stated he would not sign a bill to repeal or weaken the buffer law.
- Attorney Torseth stated that the District can respond that at this time that it is not intending to take on jurisdiction over enforcement, which will not preclude taking on enforcement after the original March 31, 2017 deadline. BWSR needs to know if there is interest or not.
- Manager Lindberg stated that the District can watch and identify what needs to be enforced, educate, assist with enforcement and continue offering the Cost Share Program.

Managers agreed to wait until the County makes a decision. Administrator Shaver stated that he has enough information to pass on to Ms. Defenbaugh.

## **6) Old Business see above**

### **a) Big Marine and Outlet Channel Memo and Draft Plan**

Administrator Shaver noted that there were substantial changes to the draft memo and plan. He also provided the 2004 approved plan that is being revised. The memo provides background and current conditions. Administrator Shaver stated that with the new plan he would like to separate the functioning and capabilities of the Big Marine Lake weir from the Turtle Lake weir. The Big Marine Lake weir is a fixed outflow weir. The Turtle Lake weir was established to maintain a range of water elevations in Turtle Lake, the surrounding wetlands and Mud Lake. The language states the target elevation drop is 1/100 of a foot.

Discussion:

- Manager De Vault stated that the plan must be absolutely clear that no matter what happens at the Turtle Lake weir, it will have no affect on Big Marine Lake's water. Doing otherwise just continues the confusion.
- In response to how to zero the water elevation out, Administrator Shaver stated that the problem is that Mud Lake is a higher elevation by a foot than the wetlands and sometimes Big Marine Lake. This adds volume that has to pass through the Turtle

- Lake weir. Manager De Vault added that the issue is the Big Marine Lake weir, not the Turtle Lake weir —there is only so much water that can be moved out.
- Commissioner Miron stated that the Turtle Lake Weir Management Plan always referenced the lake elevation on Big Marine and that is why people have connected the two. And 2/10 of a foot is important to the people on the lake. He suggested a v-notch weir because you don't have the management and tampering issues. There was a similar issue in Hugo and since a v-notch weir was installed, there have been no problems.
  - Mr. Voedisch asked about plans to lower Carnelian Creek so May can do inspections and repairs of the culvert and road at Kelly Farm. Administrator Shaver responded that May would have to build a cofferdam, get a District permit and could borrow 7" boards from the District. Commissioner Miron added residents along Long Lake have raised this issue and would be pleased to know May is talking about cleaning the pipe, which has been blocked for about five years.
  - Administrator Shaver responded that downstream conditions are not impeding the flow of the Turtle Lake weir.
  - Commissioner Miron asked that the revised plan be made available for the March 30 meeting.
  - Manager Stedman stated that terminology is very important. The District should use the term the Big Marine Lake fixed elevation structure, not weir. The Managers agreed. Manager Lindberg stated that it is also important to use only 1/100 of a foot when referring to the target elevation.

**Manager Stedman moved to authorize the administrator to release the memo and draft plan for review by the participants in the upcoming March 30 meeting. Seconded by Manager Johnson. Motion carried 5-0.**

Further Discussion:

- Manager De Vault and Administrator Shaver agreed that looking at a fixed weir at Turtle Lake might solve the water elevation issue. Manager De Vault asked for a cost estimate for the v-notch weir.
- Administrator Shaver suggested groundwater observation wells to help establish a relationship between upstream and downstream ground and surface water elevations. He thinks groundwater affects the timing of the drop of Big Marine Lake.
- Manager Tuenge suggested clarifying that it is the responsibility of the District to maintain a healthy wetland. Manager Lindberg agreed, but continued that he feels the v-notch weir would maintain the wetland. But it would be a compromise because the natural water ebb and flow would not be as robust.
- Managers agreed that before the draft plan is released to citizens, language will be added that there is no relationship between water levels at the Turtle Lake and Big Marine Lake weirs.

**Motion carried 5-0.**

**b) MPCA 319 Grant Applications**

Administrator Shaver noted that two applications were submitted to the MPCA. A funding decision should be announced at the end of April.

**7) Next Meeting is April 12, 2017**

Attorney Torseth noted that because she cannot attend the September 13 meeting, a coworker will be coming with her to the April and August meetings and will staff the September meeting. As of April 1, Lawson Law is changing its name to Galowitz • Olson, PLLC.

**8) Adjourn**

**Manager Stedman moved to adjourn at 8:41 p.m. Seconded by Manager Johnson.  
Motion carried 5-0.**

Submitted by  
Debbie Meister, MMC Associates