

Vadnais Lake Area Water Management Organization Technical Commission Minutes September 8, 2017 Vadnais Heights City Hall, Lakes Room

Commission Members Present:

Mark Graham	Vadnais Heights (VH)
Dale Bacon	White Bear Lake (WBL) - alternate
Diane Gorder	North Oaks (NO) - alternate
Gloria Tessier	Gem Lake (GL)
Paul Duxbury	White Bear Township (WBT)
Marty Asleson	Lino Lakes (LL)
Commission Members Absent	

Others in attendance: Stephanie McNamara, Kristine Jenson, Brian Corcoran, Tyler Thompson, Nick Voss (VLAWMO); Margaret Behrens (Ramsey Conservation District – RCD); Jeremy Erickson, Justine Roe (St. Paul Regional Water Service – SPRWS); Kate Winsor (NO resident)

I. Call to Order Chair Graham called the meeting to order at 7.30am.

II. Approval of Agenda

Graham wants to give an update on the White Bear Lake lawsuit and he Graham asked to move up Education and Outreach to after V. Reports.

It was moved by Gorder and seconded by Duxbury to approve the September 8, 2017 agenda as amended. Vote: all aye. Motion passed.

III. Approval of Minutes

It was moved by Graham and seconded by Bacon to approve the minutes of the August 11, 2017 Meeting of the VLAWMO Technical Commission as presented. Vote: all aye. Motion passed.

IV. Administration & Operations

A. Administrator's report

The VLAMWO Board approved the Storm sewer utility rate at its August meeting. The 2018 SSU will be \$42.63 for single family residential and \$61.44/acre for higher density and non-residential land uses. This is just short of a 15% increase. As noted last month, this increase will cover additional work on Goose Lake and on Lambert Creek maintenance as well as health insurance costs. Stephanie also passed around a flyer about doing a mini-tour of a few project sites within VLAWMO. There are 2 dates set aside this month for this and we are asking for people to rsvp.

V. Reports

A. Financial Report for September & authorization for payment.

It was moved by Graham and seconded by Bacon to approve the Treasurer's report and September payment of checks. Vote: all aye. Motion passed.

- B. Education & Outreach Report
 - 1. Watershed "Tour" 8/30

Nick reviewed how the watershed tour event went on August 30. There were a few very interested members of the public who attended. Suburban Cable Commission was there to film it and we will let you know when it will be airing on the local cable channels. 2. City Comp Plan Assistance

Nick has put together information for each of the communities to let them know what VLAWMO would like to see in their individual comp plans. We have received the first drafts for Gem Lake and Vadnais Heights and will be reviewing them and submitting comments.

Stephanie stated we will be bringing our comments to the upcoming TEC and Board meetings before we submit them back to the communities. Graham stated that each community will have one completed by the end of 2018 and they will be available to residents for review as well.

VI. Projects

- A. Project Updates
 - 1. Surveys vegetation and fish

Ramsey Conservation District completed their vegetation surveys for Charley and Wilkinson Lakes. Both lakes have Curly Leaf Pondweed however, there were other populations of native vegetation which is competing well at this time.

Kristine also reported that Steve McComas will be finishing his fish survey today on Wilkinson and Goose Lakes. The information will add more information as we try to ascertain how to reduce the nutrient levels in the lake

Brian stated that based on the first day of checking the nets, we see that the bullhead population in Goose Lake has dropped dramatically since the rough fish harvest. In 2012, we we found many crappies, bluegills, and some large-mouthed bass. We can assume that the rough fish harvest was successful at reducing the bullhead population but we can also assume that the rough fish were not the reason for the high nutrient levels in the lakes since we haven't seen nutrient reduction after removing the bullheads.

On Wilkinson, we found bullheads, bluegills, crappies, and bass. McComas said that the amount of bullhead found in Wilkinson wasn't a concern. The fish are probably getting into Wilkinson through the channels from Amelia and Black. The higher water levels in the last couple of years gives them easier access.

2. Goose Lakes Treatment Plan

The Board approved the proposal from Barr Engineering to develop an Alum treatment plan for Goose Lake. As an option to start to address the spent lime treatment possibility, the proposal would add doing sediment cores on one more basin, Oak Knoll pond which is in the drainage area of Goose Lake. Spent lime treatment of Oak Knoll pond could add substantially to the usefulness of the spent lime pilot test. VLAWMO staff are collecting samples in September to determine the current conditions of the pond. The City of WBL is partnering on these efforts by paying for the analysis of the samples.

3. Lambert Creek Maintenance: Branch 5A and main ditch

The VLAMWO Board discussed the maintenance efforts in light of the guidance provided by the VLAWMO attorney above. I heard one main question and some direction to move forward. The question had to do with who pays for maintenance work on the creek. Before the County transferred the authority to VLAWMO, they paid for a major maintenance project in the 1980's. Since then, either the communities the creek went through did or paid for minor maintenance or VLAWMO, with partners such as the St. Paul Regional Water Service secured grants for the larger projects. Keep in mind that all major projects MUST be reflected in the Water Plan. Right now there are no large projects except the Whitaker treatment wetlands in the plan, so a plan amendment would be in order (6 month process). VLAWMO could also budget funds, this might be a one or more year process depending on how much in needed. Finally, there is the benefiting property (subwatershed or drainage area) assessment outlined in our Joint Powers Agreement. It hasn't been used before and requires the cooperation of the affected communities to collect assigned funding.

The direction from the Board was to secure bids on brush removal from the main stem of the creek and also surveying specific sections of the creek that have been having flooding issues. Both efforts are underway and should have bids in by 9/8/17. Currently we have

could include:

requests out to EG Rud & Sons, Sathre-Bergqust, Jon Faraci and Kurth Surveying for the survey work and Outdoor Labs as well as Bolander for the brush removal. A ditch maintenance project initiated by one of the communities wouldn't require a plan amendment or funding from VLAWMO. It would require approval from VLAWMO and most likely the DNR & the Army COE. DNR options to address restricted flow in Branch ditch 5

1. Apply for a DNR aquatic plant management permit

(<u>http://www.dnr.state.mn.us/apm/index.html</u>). This would allow spraying herbicide to kill vegetation in the wetland to help open up an area to facilitate flow. This approach does not require a public waters permit.

2. If needed, apply for a public waters permit to excavate at inlets/outlets to the wetland, to help facilitate flow. This requires a public waters permit, but is pretty straightforward. The excavation is limited to that required to improve flow at the inlets/outlets, and the excavation can be done from land (no equipment required to enter the wetland). This could be done in conjunction with herbicide treatment.

3. If needed, remove the root mass of a portion of cattails in the wetland to help facilitate flow. This would require a public waters permit. Excavation depth would be limited to the depth of the cattail root mass and would not create an excavated channel. Detailed project plans would be required as part of the permit, specifically depth of excavation, documentation showing that there wouldn't be negative impacts to downstream flows, and a description of how equipment would access the wetland. This has the most impact of the options listed here.

Highlights on ditch authority from the VLAWMO attorney:

- Through State Statute and the VLAWMO JPA, VLAWMO should manage the ditch under section 103B which basically means VLAWMO will manage the ditch as is identified in the our Water Plan. In general, VLAWMO has the responsibility to keep the system reasonably maintained.
- How we manage the ditch should be defined in our Water Plan. There are references under Priority Issue 6 (pg. 31) Localized flooding; Under Subwatershed Activities for Lambert Creek (pg.47) and of course the budget where we pay for work (pg. 57) identifies stream restoration projects being funded periodically. The Water Plan may be updated and the ditch management plan further clarified. VLAWMO would go through a plan amendment process with BWSR and our stakeholders to do that.
- The VLAWMO responsibility to the ditch is much like municipal responsibility to maintain roadways in a safe condition that does not cause damage to others property.
- A petition by individuals or groups would not be accepted because we are not managing it under ditch law (103E) we are using watershed plan law (103B). The watershed could be found liable if it "fails to maintain the ditches and that failure allegedly results in damage to properties." VLAWMO could always be sued of course if someone felt we were not providing 'reasonable maintenance'.
- VLAWMO may want to consider hiring an engineer to inspect all or portions of the ditch for maintenance issues. VLAWMO staff and municipal partners have been checking for erosion or obstructions. The inspection that might be done by engineers would also include hydraulic capacity and rate. Hydrologic and hydraulic modeling (H & H) would also help us understand the plumbing of this system.

Discussion:

Stephanie stated that any larger project we want to implement on the ditch will require an amendment to our Water Plan and this will have to be done before we can move ahead with any project. That means it may take longer for us to implement a project versus the City. Additionally, we have to budget for any projects.

Brian asked Outdoor Labs for an estimate to do some clearing on a portion of the creek. The rough estimate was about \$35,000.

Graham stated that he sees VLAWMO as doing the larger scale planning and project implementation and he feels it is more of a City responsibility to maintain the ditches.

VLAWMO staff and Graham are meeting with Jen Sorenson from the Dept of Natural Resources today to discuss these issues and hopefully have some written direction for what our next steps should be regarding this topic.

4. Company requested pilot projects – algae & zebra mussel treatments Two other research projects may happen in VLAWMO waters aimed at controlling excessive growth of target species. Nothing is set in stone yet – there have been some very preliminary discussions with the representatives for the companies and it may come before EcoSOAR ™ would like to see if their KRIA lonizer, which creates and injects superoxide, negatively charged oxygen into the water could control zebra mussels. The company claims it is effective at removing algae and a variety of other things in water. They have tested it on zebra and quagga mussels, both highly invasive, in the lab. They would like to try it in open water. The company explains these two mussels use a particular and fairly unique enzyme which makes them susceptible to superoxide. Keith Boulais, who is distributing this lonizer is hoping to put together a partnership which would include VLAWMO (providing the zebra mussels), Premier Materials (distributer of EcoSOAR, Kria lonizer) and a research scientist from USGS, LaCrosse to develop the testing plan.

5. Capstone Project

A project abstract to study the lake level issues for Pleasant Lake has been submitted for a Capstone Project at the University of Minnesota. Jeremy Erickson from SPRWS worked on the abstract for developing a Capstone project for U of Minnesota students to study. The study would analyze the effects of water levels in Pleasant Lake and determine what would be the natural fluctuations of the lake and if the SPRWS could adjust their pumping to reflect more natural lake level changes. We should hear by the end of the month if it was chosen.

VII. Programs

A. WCA – Larey – Incidental wetland review

Brian stated that the homeowner at this site is now working with an engineering company to pursue historical data on the site in order to support her opinions of the wetlands and water table there. Brian said he keeps this topic on the agenda so that folks are aware of what is happening, especially if it ends up going to court.

VIII. Commissioner Reports

-Gorder stated that the City of NO has approved the replacement of the pedestrian bridge at Deep Lake Channel and they will be putting in a truss bridge and now looking to determine what the next steps will be. She also introduced Kate Winsor to the group. She is on the North Oaks Natural Resources Commission. -RCWD electric carp barrier is working well and now the osprey are hanging out there and capturing the stunned carp and eating them.

-Graham stated that the WBL court decision was against the government and it will be interesting to see how things move forward from here. It will require a lot more discussions about how

IX. St. Paul Regional Water Service (SPRWS) Report

Justine mentioned that she and Jeremy volunteered at the State Fair Eco Experience building at the Water Bar. She thought it has provided a great way to get people talking and thinking about water and tasting the water from different parts of the state.

Highland Water Tower open house will be October 14-15.

- X. Ramsey Conservation District (RCD) Report
- XI. Public Comment
- XII. Next Meetings
 - TEC: October 13; Board: October 25

XIII. Adjourn

It was moved by Tessier and seconded by Asleson to adjourn at 8:30am. Vote: All aye. Motion passed.

Minutes compiled and submitted by Kristine Jenson.