



MINUTES OF THE BOARD OF DIRECTORS
 October 23, 2019

Attendance		Present	Absent
Jim Lindner, Chair	City of Gem Lake	X	
Dan Jones	City of White Bear Lake	X	
Rob Rafferty, Secretary-Treasurer	City of Lino Lakes		X
Ed Prudhon	White Bear Township	X	
Marty Long, Vice Chair	City of North Oaks	X	
Patricia Youker	City of Vadnais Heights	X	
Stephanie McNamara	Administrator	X	
Brian Corcoran	Water Resources Mgr.	X	
Dawn Tanner	Program Development Coord.	X	
Nick Voss	Education & Outreach Coord.	X	
Tyler Thompson	GIS Watershed Tech.	X	

Others in attendance: Paul Duxbury (VLAWMO TEC commissioner & rep.); Kurt Carpenter, WBL resident

I. Call to Order

The meeting was called to order at 7:01 pm by Chair Lindner.

II. Approval of Agenda

The agenda for the meeting was presented with no changes proposed.

A motion was made by Prudhon and seconded by Jones to approve the meeting agenda as presented. Vote: all aye. Motion passed.

III. Visitors and Presentations

A. October TEC Report to the Board and October 2019 Finance Report,

Duxbury presented the TEC's operations and recommendations to the Board. There were 3 recommendations for approval the TEC moved at their October meeting: the Otter Project equipment funding, selection of SEH for the Vadnais-Sucker RFP, and to submit for the CWP restoration grant for 4th & Otter. McNamara presented the October Finance Report.

IV. Consent Agenda

A. Approval of Minutes

The minutes from the August 28th, 2019 Board meeting are placed on the consent agenda for approval, as presented.

B. Project update reports

Staff has completed a list updates to report on projects and programs not up for discussion on the Board meeting agenda. These updates were included in the October Board packet and may be discussed if any Directors would so choose.

Discussion: none.

A motion was made by Long and seconded by Youker to approve the October 23, 2019 meeting consent agenda, including the August 28, 2019 Board meeting minutes, as presented, and staff project update reports. Vote: all aye. Motion passed.

V. **Business**

A. **Administration**

1. EAW: Public Hearing and determination consideration, Res. 05-2019

McNamara presented that agency comments have been received and responded to by Barr Engineering, Ramsey Washington Metro Watershed District's engineer regarding the proposed West Vadnais Lake Outlet Project. A Summary of Comments & Responses and Findings of Fact have been supplied to the VLAWMO Board of Directors for their review, discussion, and consideration of Resolution 05-2019. The Board was asked to consider Resolution 05-2019, EAW comments and responses, along with findings of fact to be a sufficient environment review, and whether the record of decision be either a negative or positive determination for further review via an Environmental Impact Statement. McNamara noted 2 later comments: The Office of the State Archaeologist realizes the area of work has already been disturbed on several occasions, but for the contractor to be vigilant and wary of any possible artifacts that may be uncovered. Also, the Vadnais Heights City Engineer provided comments questioning whether further modeling may be necessary to ensure the project will be effective, once installed. McNamara noted that Barr Engineering has responded to these comments.

At 7:11 pm Chair Lindner officially opened the Public Hearing for the EAW regarding the West Vadnais Lake outlet elevation change. There was no comment. The Chair officially closed the public hearing at 7:12 pm.

Discussion: Youker stated the City's concerns of drawing down of West Vadnais Lake and questions what other efforts are being performed upstream outside of the Watershed, as well as what is included in terms of a partnership. McNamara outlined physical processes such as berming and pumping, but also that watersheds work together to solve common issues. McNamara will forward further EAW responses and explanations.

A motion was made by Prudhon and seconded by Jones for approval of Resolution 05-2019, resulting in a negative determination for further environmental review, and accepting the EAW and its appendices for the lowering of the West Vadnais Lake outlet and OHW. Vote: all aye. Motion passed.

2. Approval of storm sewer utility certification lists for 2020, Res. 06-2019

McNamara presented that the parcel lists that are generated annually as a combination of staff and consultant work to determine the list of non-exempt parcels within VLAWMO's boundary for payment and funding in 2020 have been prepared and are ready for certification.

Discussion: Long questioned why golf course SSU fees are so large, and asked for further explanation for 2021 fees. McNamara and Lindner responded that each land use type has a specific calculation formula, but more in-depth explanation can be had.

A motion was made by Long and seconded by Jones for approval of Resolution 06-2019, certifying the storm sewer utility parcel lists in Ramsey and Anoka Counties for VLAWMO's 2020 storm sewer utility fees. Vote: all aye. Motion passed.

3. MPCA/Minnesota CWP Revenue Bond, Res. 07-2019

Tanner reported that the final step in release of CWP loan funding is for VLAWMO to authorize sending the Revenue Bond Note to the MPCA. After further analysis and engineering, SEH has determined that the estimate of sheetpile replacement will be above previous estimated costs. Staff has discussed this with the MPCA and an amendment to the loan amount will likely begin in spring 2020 after a bidder has been selected for

construction. **Staff recommends the Board authorize submittal of the Revenue Bond Note to the MPCA.**

Discussion: None.

A motion was made by Prudhon and seconded by Youker for authorization to submit the CWP Revenue Bond Note to the MPCA for allowance of fund distribution. Vote: all aye. Motion passed.

B. Goose Lake

1. Board review and recommendation regarding alum treatment and boating restrictions

VLAWMO staff was present for the October 8th White Bear Lake City Council meeting where formal boating restrictions on East Goose Lake were first presented for discussion. Staff was also present at the October 22nd Council Meeting where a short presentation was given and a drafted boating restriction ordinance was brought and discussed for adoption.

Discussion: Jones gave an overview of the proceedings of the October 22nd White Bear Lake City Council meeting, regarding the presentation and discussion of potential boating restrictions on East Goose Lake. Jones discussed that general sentiment regarding an ordinance was not favored by Council members, and further discussion or motion was tabled for a January meeting. McNamara questioned if there was direction that the Board would give staff until the awarding of the grant is announced in January. Prudhon and Long discussed that the Board already gave VLAWMO's recommendation to the City at the August meeting, so any action or decision is now the responsibility of the City. Lindner and Jones discussed that an alum treatment is still the best economical option for nutrient reduction in East Goose Lake, and VLAWMO should still be involved. The directors agreed that staff has provided more than a sufficient amount of information to the City for their consideration, and should not be hindered by further efforts at this time. Tanner mentioned that several misleading and misinformed discussion points were made at the Council meeting and a list of responses has been composed. Tanner asked the Board to consider if these responses should be sent to Council members and the Mayor. The Board agreed these clarifying points would be beneficial for distribution (Attachment 1 to minutes).

A motion was made by Prudhon and seconded by Long for staff to distribute a list of clarifying points regarding East Goose Lake at the October 22nd White Bear Lake City Council meeting to City Council members and the Mayor. The letter would also be attached to these minutes for the record. Vote: all aye. Motion passed.

C. Wetlands

1. Vadnais-Sucker Park RFP

Corcoran presented that Request for Proposals (RFP) for the Vadnais/Sucker subwatershed, Phase I wetland assessment were sent to 7 consulting/delineation firms, of which, 4 firms submitted proposals and bid estimates. Proposals ranged from \$16,000 to \$74,950 to complete tasks outlined in the RFP. The lowest responsible bidder was S.E.H. and was recommended by staff to the TEC at their October meeting for recommendation to the Board to enter into contract with S.E.H. for the proposal. **The TEC accepted and, along with staff, is recommending to the Board the selection of the lowest responsible bidder, S.E.H., for entering into contract for the Phase I: Vadnais/Sucker Wetland Assessment, at the cost of \$16,000.**

Discussion: Lindner asked if any suggested price was solicited before the RFP was sent out. Corcoran addressed that no, there were none solicited before issuing the RFP. Youker asked about the extras column and that SEH had none listed and asked for clarification on this. Corcoran clarified that this was an area where firms may include optional extra items on top of required items included in the RFP.

A motion was made by Jones and seconded by Youker to accept the bid and enter into contract with S.E.H. at the cost of \$16,000 for the Phase I: Vadnais/Sucker Wetland Assessment. Vote: all aye. Motion passed.

2. Conservation Partners Legacy (CPL) Grant Proposal

Tanner presented that as part of the 4th & Otter Project, restoration of the area where the project is taking place, along with the adjacent parcel, newly-acquired by the City of White Bear Lake, will apply to the goals of the Clean Water Fund grant. The grant proposal is for replanting with a native shady woodland seed mix for a total of \$8,636. If awarded, there is a local match of 10%. The TEC recommended the application for submittal of the grant application at their October meeting. **Staff is seeking authorization from the Board to submit the CPL grant proposal for the total of \$8,636.**

A motion was made by Prudhon and seconded by Long to authorize staff to submit the application for the CPL grant proposal in the amount of \$8,636. Vote: all aye. Motion passed.

3. Otter Project Equipment Request

At the August 2019 meeting, the Board authorized entering and being a partner to an otter study within VLAWMO. Partners include the MN Zoo and departments from the University of MN. The MN Zoo proposal (\$5,000) is in to the Zoo Committee and includes vet time and time and equipment for disease and heavy metal sampling/analysis and tracker implementation, along with hiring of an animal trapper. The U of M will be conducting scat parasite load at the Vet Diagnostic Lab. The Fisheries, Wildlife, and Conservation club will be submitting a proposal during the spring 2020 semester to fund ~\$2,500 of related vet equipment. Tanner is proposing purchasing radio telemetry equipment to begin prepping for the 2020 project at a cost of \$1,815 for a receiver, 5 transmitters (2 initially and 3 later), and an antenna. This was brought to the TEC at their October meeting and approved for recommendation to the Board for funding authorization. **Staff and TEC recommends purchasing telemetry equipment and testing over the winter. Staff proposes an expense of \$1239 now, and the remaining \$576 if and when additional transmitters are needed (fall 2021 would be the earliest additional transmitters might be needed).**

Discussion: Long commented he liked this and questioned how this benefits the Watershed and accomplishes its goals towards water quality. Tanner responded that the project studies animals that are indicator species of water quality and monitors pollutants such as heavy metals. Jones commented that the project also provides public relations benefits.

A motion was made by Long and seconded by Prudhon to authorize funding in the amount of \$1,815 for the purchase of telemetry equipment for testing and implementation in the Otter Project. Vote: all aye. Motion passed.

VIII. Discussion

Jones posited a discussion about the possibilities of offering either guidance or assistance to member municipalities in leveraging funding for offsetting the purchasing of new equipment that includes innovative salting technology.

IX. Administration Communication

1. MN Association of Watershed Districts (MAWD)

McNamara mentioned the annual meeting is coming up and asked if a Board member would be interested attending MAWD as a delegating member on December 6th.

2. Nov. 14th vlawmo celebration and end of year recap

3. North Oaks Local Water Management Plan (LWMP)

X. Adjourn

A motion was made by Youker and seconded by Prudhon to adjourn at 8:03 pm. Vote: all aye. Motion passed.

Minutes compiled and submitted by Tyler Thompson.

Attachment 1: Follow-up Notes to October 10, 2019 White Bear Lake City Council Meeting

October 23, 2019

City of White Bear Lake
Mayor and Councilmembers

From VLAWMO Staff and VLAWMO Board of Directors:

VLAWMO would like to respond to statements made during the Council meeting on October 23, 2019, and clarify points that may not have been clear during the presentation.

- **Algae blooms: Status**

Algae blooms are occurring continually on Goose Lake, starting in late spring through fall. VLAWMO has not received reports of dramatic blue-green blooms since 2013. However, Chlorophyll a levels on East Goose Lake show a lake that is dominated by algae. Algae has gotten worse since the TMDL (Total Maximum Daily Load) was published. At the time, there were still some plants present on East Goose Lake. Algae have completely shaded out plants so that the lake is now devoid of plants. This was documented in the plant survey this summer by the Ramsey County Soil and Water Conservation Division (RCSWCD). Algae in the lake include blue-green algae, also documented on the vegetation survey. Blue-green algae can produce toxins that are harmful to humans, pets, livestock, and wildlife.

Ongoing monitoring is not done for harmful algal blooms because the algae can be present and not produce toxins, and they can produce toxins when they are not especially thick nor apparent to observers of a lake. Harmful algal blooms are a health concern. A harmful algal bloom was documented on Pleasant Lake in the Vadnais Lake Area Watershed during summer 2019. A dog became sick, and the algae bloom was reported to the Minnesota Pollution Control Agency (MPCA). Both the MPCA and Minnesota Department of Health have increased efforts to document, alert, and educate about the threat of toxic algal blooms. The Centers for Disease Control has a short information page that cover the most important points. They recommend not going into water that looks like has abundant algae, “When in Doubt, Keep Out”:

<https://www.cdc.gov/habs/be-aware-habs.html>

- **The connection between TMDL load reductions and MS4 waste load allocations may have been unfamiliar to some councilmembers**

The VLAWMO TMDL (Total Maximum Daily Load) is a study completed in partnership with and approved by the MPCA and the EPA. It identifies how much improvement is needed for each impaired water and how that improvement effort will be divided among NPDES MS4 permit holders. The Implementation Plan further identified strategies to address the impaired waters. MS4 agencies are through their

NPDES permit with annual reporting through the SWPPPs. The City of White Bear Lake has an assigned phosphorus reduction of 64.7 lb/yr in East Goose Lake and 7.3 lb/yr in West Goose Lake. That is a total reduction of 72 lb/yr in the Goose Lake subwatershed.

If the City chooses to pursue the 3 next-best, non-alum treatment options to improve stormwater treatment in the subwatershed, that would come at a cost of \$500,000 and only provide a 60-pound reduction. That would not meet the required target.

If the City chooses to pursue an alum treatment on East Goose Lake, that would treat 800 lb/yr of phosphorus and allow the City to exceed the target by 728 lb/yr at a cost of \$170,000. Side note on the currently submitted grant proposal: VLAWMO increased the funds requested in the grant proposal to \$190,000 to allow for possible fish harvest and an increase in costs since the feasibility study was completed.

There is also an additional social cost of removing boat activity of 4 boats for 3 years. We recognize that the Council is weighing that. The removal of boating could likely be reduced to 2 full growing seasons (full season after a fall treatment + the summer after a follow-up spring treatment).

- **Half Moon Lake was presented as a case study of a similar lake that did not work**

The Barr report cited by residents regarding Half Moon Lake was from the 1990s. That lake has been under intense management efforts since that time with different goals. The alum treatment was effective, and the council, park board, and others passed an ordinance and did remove boats to protect the alum treatment. There was also considerable study done to directly measure the effects of boats at ski jump sites and at other sites around the lake prior to the decision to remove boats.

Half Moon continues to have high nutrient load from external sources. Stormwater practices around the lake have not been totally effective and feature a number of overloaded swales. Those swales are not doing the job of pre-treatment. Managers are also working to keep the lake below 30 µg/L, which is well below the shallow lake standard (60 µg/L). They are using a more frequent regimen for alum treatment to keep the lake below 30 µg/L.

There was a published recommendation for Half Moon Lake to continue to treat on a 3-5 year cycle. That was incorrectly understood by residents as pertaining to East Goose Lake, which it does not. VLAWMO has published papers and unpublished reports covering a wide span of time on Half Moon if councilmembers would like to review more about this lake.

- **How long will an alum treatment last on East Goose?**

The East Goose Lake alum treatment, calibrated to lake sediments, the specific P load in those sediments, and lake morphometry characteristics is projected to last 10-15 years using best practices of appropriate dosing and protecting the bottom from disturbance during the floc settling phase. Shallow

lakes analyzed in the literature including early treatments that did not perform well show have an average lifespan of 5.7 years. When lakes with improved conditions (best practices) are reviewed, they last an average of 15 years.

- **A councilmember asked if not treating East Goose would make the nutrient situation worse downstream. That was later interpreted to mean that there would be no downstream effects.**

Downstream effects are already apparent. There are high nutrient loads in Lambert Creek and associated wetlands. These areas are also the target of VLAWMO projects, including a remainder of the ditch at Lambert Lake to remove nutrients and bacteria. High nutrient loads flowing from East Goose Lake do affect waterbodies downstream. However, there is also filtration occurring along the way from East Goose Lake to East Vadnais Lake. We do not see high nutrient levels in East Vadnais. Low levels of toxins from upstream algae blooms are documented. They pose only a moderate threat. The water utility does not conduct additional treatment for algae because it is not needed at this time.

- **A persistent issue that has been mentioned and would likely remain an issue if the alum treatment were to go forward is the view of optimal lake condition. Would rooted emergent plants be acceptable in part or all of Goose Lake?**

Shallow lakes in our area have two alternate stable states: clear water with plants or murky water with algae. An alum treatment would make the water clear and allow plants to grow again. Residents on the lake view these as weeds and a nuisance in need of control. VLAWMO and other state agencies view them as the optimal, healthy condition, providing habitat for fish and other wildlife. Fish management without aquatic vegetation is not sustainable, as vegetation is a necessary component of healthy habitat. Aquatic vegetation also uptakes nutrients, decreasing algae and clarifying the water. If plants don't use the nutrients, algae will. Algae provide poor nutrition, and predator fish higher up the food chain often don't survive. East Goose Lake contains many stunted (food-limited) Black bullhead and sunfish.

From the TMDL: *The abundance and diversity of native aquatic plants drive the health of shallow lake ecosystems and are critical to keeping shallow lakes in a clear state. They provide spawning areas and cover for fish, habitat for macroinvertebrates, refuge for prey, and stabilization of sediments.*

VLAWMO would not seek to control native plant species on the lake. VLAWMO would make it priority to actively work to control invasive species that may become present in the lake once water-quality conditions improve and promote colonization of native species. Curly-leaf pondweed is an invasive species, often spread by boat activity, that is present on West Goose. There are examples of cost-share options in neighboring watersheds that support harvest of aquatic vegetation with appropriate permitting and at levels approved by the MN DNR. That could be a possibility for future management on East Goose Lake.