

## VLAWMO TECHNICAL COMMISSION MEETING

7:30 AM January 8<sup>th</sup>, 2021

Meeting will be held by Zoom teleconference. Meeting link:

<https://us02web.zoom.us/j/82609413241?pwd=Qy9rcURGb2VPdjB4UkV3VDVyWHA2UT09>

Meeting ID: 826 0941 3241

Passcode: 874971

Dial by location: +1 312-626-6799 US (Chicago)

Action items: ✈

- I. Call to Order – 7:30am –Chair Gloria Tessier
- II. Approval of Agenda
- III. Approval of Minutes (December 11<sup>th</sup>, 2020)
- IV. Administration & Operations
  - A. Election of 2021 TEC Officers ✈
  - B. Financial Report for January & authorization for Payment – Phil ✈
- V. Programs
  - A. Education & Outreach – Nick
    - 1. Community Blue update: Upstream/WB Center for the Arts
    - 2. Newsletter naming: Options and voting
    - 3. Educate the group: Raingarden studies summary
  - B. 2020 Cost Share Program results and 2021 update – Tyler
- VI. Projects
  - A. Lambert Lake update and invasive Phragmites ID'd – Dawn
  - B. Great River Greening update – Dawn
  - C. Completed Vegetation Surveys for 2020 (linked) – Dawn
  - D. 319 update – Dawn
  - E. Pleasant Lake planning for 2021 – Dawn
  - F. Otter Spotter project live and StoryMap share – Dawn
- VII. Commissioner Reports
- VIII. NOHOA
- IX. Ramsey Soil & Water Conservation Division
- X. St. Paul Regional Water Services
- XI. Public Comment
- XII. Next Meetings: TEC: February 12<sup>th</sup>, Regular Board Meeting: February 24<sup>th</sup>, 2021
- XIII. Adjourn

Upcoming Events: [vlawmo.org/events](http://vlawmo.org/events)

Cost-share open-house: February \_\_\_\_

Email newsletter blast: January 12<sup>th</sup>



The Vadnais Lake Area Water Management Organization  
800 County Road E East, Vadnais Heights, 55127 651-204-6070  
Website: [www.vlawmo.org](http://www.vlawmo.org); Email: [office@vlawmo.org](mailto:office@vlawmo.org)

Vadnais Lake Area Water Management Organization  
Technical Commission Minutes  
December 11, 2020

Zoom Teleconference Open Meeting:

<https://us02web.zoom.us/j/83828772829?pwd=RzhmTEFRSGdkYnh6ZHd4cW9vNDc3Zz09>

Join by phone: +1-312-626-6799; meeting ID: 838 2877 2829; password: 234257

**Commission Members Present:**

Gloria Tessier	Chair, Gem Lake (GL)
Jesse Farrell	Vice Chair, Vadnais Heights (VH)
Bob Larson	Treasurer, North Oaks (NO)
Paul Duxbury	White Bear Township (WBT)
Andy Nelson	Lino Lakes (LL)
Terry Huntrods	White Bear Lake (WBL)

**Commission Members Absent:** none.

**Others in attendance:** Phil Belfiori, Brian Corcoran, Dawn Tanner, Nick Voss, Tyler Thompson (VLAWMO); Justine Roe (SPRWS); Kara Ries, Diane Gorder (North Oaks); Sierra Weirens (MN Water Steward); Ann WhiteEagle (RCSWCD); Connie Tailon (City of White Bear Lake); Ed Shapland (VLAWMO MN Water Steward).

- I. **Call to Order** Chair Tessier called the meeting to order at 7:30 am. A roll call was made for attending Commissioners of the electronic meeting: Farrell: present Larson: present Duxbury: present Huntrods: present Nelson: present Tessier: present.
- II. **Approval of Agenda**  
The agenda for the December 11, 2020 Technical Commission Meeting was presented for approval. It was moved by Larson and seconded by Huntrods to approve the December 11, 2020 TEC agenda, as presented. Vote: Tessier: aye Larson: aye Duxbury: aye Nelson: aye Huntrods: aye. Motion passed.
- III. **Approval of Minutes**  
It was moved by Duxbury and seconded by Larson to approve the November 13, 2020 meeting minutes, as presented. Vote: Tessier: aye Farrell: aye Larson: aye Duxbury: aye Nelson: aye. Motion passed.
- IV. **Administration & Operations**
  - A. **Financial Report for December & Authorization for Payment**  
Belfiori presented the December Financial Report for review and authorization of payments. The budget continues to be on-track for what was budgeted for the remainder of 2020.  
  
It was moved by Farrell and seconded by Duxbury to approve the December Treasurer's Report and authorization of payments. Vote: Tessier: aye Farrell: aye Larson: aye Duxbury: aye Nelson: aye. Motion passed.
  - B. **2021 Board-Approved Working Budget – Update from Dec. 9 Board meeting**  
Belfiori presented the 12/9/20 Board-approved fund balance & carryover working budget for 2021 and the various sub-budgets.
- V. **Programs**
  - A. **Education & Outreach**
    1. **2021 EOP/2020 Survey Results**  
Voss presented a 2020 EOP summary that was still able to accomplish the majority of Program goals despite the complications of the COVID-19 pandemic. 2020 survey results, along with 2021 goals were overviewed.

## 2. MN Water Stewards

Voss introduced the 2021 Water Steward nominees, Sierra Weirens and Gary Ellis. Staff is recommending TEC approval of the 2021 Water Stewards Sierra Weirens and Gary Ellis.

It was moved by Huntrods and seconded by Larson to approve Gary Ellis and Sierra Weirens into the MN Water Stewards Program for 2021. Vote: Tessier: aye Farrell: aye Larson: aye Duxbury: aye Huntrods: aye Nelson: aye. Motion passed.

## 3. Awardee Photos

Voss presented and shared photos of VLAWMO's 2020 Watershed Steward Awardee, Ceci Shapland, and Watershed Partner Awardee, Connie Tailon.

## VI. Projects

### A. Lambert Lake Update

Tanner reported that the preconstruction meeting has taken place for the sheetpile replacement and meander construction. Though the weather has been warming, construction will be continuing as temps continue to lower. The Board approved a loan disbursement request for additional loan funds, if needed, for the continuity of construction. UMN researchers are continuing to work on biochar design.

### B. Amelia Lake Surveys

After VLAWMO staff requested a quote for bathymetry, macrophyte, and invasive species delineation, RCSWCD has quoted \$5,750 for 2021 surveys. Staff is requesting a recommendation to the Board for Amelia Lake surveys in 2021 for \$5,750.

It was moved by Huntrods and seconded by Farrell to recommend approval to the VLAWMO Board for the funding of Amelia Lake surveys in 2021 in the amount of \$5,750. Vote: Tessier: aye Farrell: aye Larson: aye Duxbury: aye Huntrods: aye Nelson: aye. Motion passed.

### C. Great River Greening

Tanner updated that the Great River Greening grant for Vadnais-Sucker Park habitat restoration is fully authorized and signed, and work will begin in early 2021. Staff will be meeting with GRG staff in the near future to further coordinate.

### D. Pleasant Lake Carp Solutions Report

Tanner updated that Carp Solutions has completed and provided an interim report on the carp project in Pleasant Lake, and carp movement within the North Oaks chain of lakes. Carp movement tracking will resume in spring 2021.

### E. Birch Lake Animal Hospital Variance Request

Corcoran presented that staff had originally brought this variance request to the VLAWMO Board at their October meeting, but was asked for TEC recommendation for approval before final Board approval. Corcoran updated that the request is a variance to VLAWMO's wetland buffer rules for the expansion of a current parking lot. As part of the variance request, an infiltration basin will be constructed for parking lot stormwater runoff capture and treatment, which currently does not exist. The wetland is a VLAWMO Manage 2 wetland, requiring a 30 foot average, or 24 foot minimum development buffer distance from a wetland. Staff is recommending a TEC recommendation for approval to the Board for a VLAWMO Buffer Variance, with the contingency on the installation of an infiltration basin as part of the project.

**Discussion:** Duxbury asked about the current drainage of the site, and neighboring property drainage. Corcoran responded that current parking lot drainage goes to White Bear Pkwy. Farrell asked about increasing the buffer of the on-site wetland with no mowing. Tessier asked about the current parking situation, and Corcoran responded that business parking is spilling onto White Bear Parkway and to the neighboring property. The TEC noted that the

addition of a buffer monument and native planting should be made a contingency for the approval of a VLAWMO wetland buffer variance for the project.

It was moved by Farrell and seconded by Larson to recommend approval to the VLAWMO Board of wetland buffer variance request for the parking stall addition, contingent on installation of an infiltration basin, buffer monument, and native planting buffer. Vote: Tessier: aye Farrell: aye Larson: aye Duxbury: aye Huntrods: aye Nelson: aye. Motion passed.

**F. Lower Lambert Ditch #14 Maintenance**

Corcoran presented the results of the recent conclusion of the lower Lambert Creek/Ditch 14 dredging and maintenance.

**G. Update on 12/1 East Goose Lake Neighborhood Conversation kickoff meeting**

Belfiori spoke on the December 1<sup>st</sup> neighborhood conversation kickoff for introductory and comments and input on East Goose Lake management.

**VII. Commissioner Reports:**

None.

**VIII. NOHOA**

Gorder congratulated both Weirens & Ellis for joining the MN Watershed Stewards with VLAWMO, and John Cotner is a new NOHOA Board member who is working on North Oaks and likely to join in 2021 VLAWMO TEC meetings.

**IX. Ramsey Soil & Water Conservation Division (RCSWCD) Report**

WhiteEagle thanked VLAWMO for working together on on-going projects and for continuing on with lake survey services.

**X. St. Paul Regional Water Service (SPRWS) Report**

Roe noted that the SPRWS plant upgrade is moving forward with a contractor selected.

**XI. Public Comment**

Kara Ries noted that Tom Watson will be joining the January VLAWMO TEC meeting in 2021.

**XII. Next Meetings**

TEC: January 8<sup>th</sup>, 2021; Board: February 24<sup>th</sup>, 2021

**XII. Adjourn**

It was moved by Larson and seconded by Huntrods to adjourn at 8:49 am. Vote: Tessier: aye Farrell: aye Larson: aye Duxbury: aye Nelson: aye. Motion passed.

Minutes compiled and submitted by Tyler Thompson.

## TEC Staff Memo – January 2021

### IV. Administration & Operations

**A. Election of 2021 TEC Officers Election of Officers.** With January comes the need to elect or confirm a slate of officers for the Technical Commission. Per usual, the Board will officially appoint the TEC Chair but they look to the TEC to recommend who they want as Chair for the year. Currently:

Gloria Tessier, Chair

Jesse Farrell, Vice Chair

Bob Larson, Financial officer

Paul Duxbury, Liaison to the Board

### B. Financial Report for January & Authorization for Payment.

The January finance report will be emailed out separately the week of 1/4/21

### V. Programs

#### A. Education and Outreach:

1. Community Blue Grant Update: White Bear Center for the Arts

The White Bear Center for the Arts (WBCA) submitted a Community Blue Grant in February, 2020. This project was postponed for 2021, and was to be re-assessed at the end of 2020. Upon re-assessment, VLAWMO and WBCA staff have determined that a simplified project to adapt to COVID-19 conditions is possible for 2021. WBCA have agreed to submit an update grant application with an updated budget and objectives in Spring, 2021. Early strategies for simplification include but are not limited to:

- Trimming the curated tea ceremonies/water issue conversations from 10 to 6.
- Pursuing online promotion on the front-end, such as a guest speaker or webinar event related to local water issues and artistic water expressions.
- Holding more events outdoors during Summer, 2021, and compiling tea ceremonies into single days (am/pm editions on Saturdays, etc.)

A first payment to WBCA for the project was sent in March, 2020 prior to the project being postponed. This payment of \$5,407 will provide funding for the renewed 2021 project, and VLAWMO Education and Outreach will be utilized for any remaining funds, to be determined upon review of the Spring, 2021 updated application.

## 2. Newsletter Naming:

VLAWMO staff are considering a name for their regular email newsletter. While VLAWMO has used “newsletter” as a basic title for several years, other watersheds have started to include titles for their newsletters in the vein of a newspaper or journal subscription. Staff have considered these options and present them to TEC for an informal voting discussion:

1. The Drop
2. The Runoff Report
3. The Runoff Rundown
4. The Ditch Digest
5. VLAWMO Chronicle
6. Diary of a Watershed / A Watershed Diary

When considering these options, we’re looking for a title that is catchy, builds interest, and easily conveys a message that supports VLAWMO’s efforts.

## 3. Educate the Group: Raingarden effectiveness

The VLAWMO Education and Outreach Plan outlines an interest to maintain active learning in the VLAWMO community (staff, TEC, BOD, etc.). To continue this effort and invite TEC members to engage with content from the field of water resources, TEC members are encouraged to review the provided articles about the effectiveness of raingardens on water quality.

USGS: [https://pubs.usgs.gov/sir/2005/5189/PDF/SIR2005\\_5189.pdf](https://pubs.usgs.gov/sir/2005/5189/PDF/SIR2005_5189.pdf)

This 2004 study took an in-depth look at several raingarden locations in the Twin Cities, the closest to VLAWMO being Hugo, MN. This article is interesting for VLAWMO staff because it provides a look at more detailed and specific water quality monitoring than what is typically conducted by a watershed organization such as VLAWMO. A summary of the findings includes:

- Inflow of stormwater runoff nutrients is assumed to benefit plant growth within raingardens.
- Deposition of suspended solids can reduce infiltration effectiveness, however root systems from plant communities create conduits to counter this problem.
- Evidence of groundwater chemistry changes beneath raingardens.
- Raingarden systems evolve over time, stressing the importance of maintenance.
- More research and long-term monitoring is needed.
- Vegetation type likely affects infiltration, nutrient uptake, and evapotranspiration.

Nanjing Tech University, China: <https://www.mdpi.com/2071-1050/12/23/9982/htm>  
A 2020 study held in Kyoto, Japan investigating flood mitigation and nutrient improvement from raingardens.

- Total runoff reduction rate for study site

- Peak flow delay in 100-year storm event level. Vegetation helps reduce velocity and supports delay.
- Not excellent flood node control for heavy rainstorms (once raingardens are saturated), but effective over a five-year return period in context of short-term rainstorms.
- Contaminant reduction, documented removal ratios of 12-14% for the studied three-year return period.

Summarizing these studies from 2004 and 2020, we can see that raingardens are documented to be effective in flood mitigation and nutrient removals, yet studies show the importance of ongoing maintenance. Studies in this area tend to be a few years in length, and can only document raingarden impacts for these relatively small periods. Retaining the conditions that were present during the study through routine maintenance helps to ensure this effectiveness.

## **B. 2020 Cost Share Program results and 2021 Update**

Tyler will be presenting a short recap of 2020 Cost Share grant projects & numbers and will update on any new news of the restructured 2021 Cost Share Policies. The new Policies will be live on [vlawmo.org](http://vlawmo.org) on January 1<sup>st</sup>, 2021 and ready for applications.

## **VI. Projects**

### **A. Lambert Lake Update**

At the time of packet prep, construction has not yet begun. Sunram and Atlas are both coordinating with SEH and VLAWMO to prep the site and prepare for construction. Photographic structure surveys were completed December 21, 2020. Sunram contacted all 21 properties via hard-copy door hangers and following up by knocking and attempting to talk to all residents in person. VLAWMO recognized that residents may not wish to have people in their homes due to COVID. Sunram responded by using two forms of contact and providing information that included that residents waive a right to assign damages to VLAWMO due to sheetpile installation if they do not allow a photographic survey pre/post. All properties are outside of a possible vibration zone of impact, so risk of damage during sheetpile replacement is quite low. Two residents at separate properties responded that they would like the surveys to be completed. These were done with representatives from Sunram, VLAWMO, and a professional photographer.

While conducting the photographic surveys, VLAWMO staff noticed a stand of Phragmites (common reed grass) that looked like it could be invasive. With landowner permission, a sample was collected, photographed, and shared with the UMN expert. It was verified as invasive. It has been reported in EDDMapS and shared with RCSWCD. It will be added to the list for treatment next year. Close monitoring of this area is necessary because invasive Phragmites could spread widely in Lambert Lake, if not treated and monitored.

As site prep continued, VLAWMO was contacted regarding two structures that were possibly in the way of construction: an aluminum row boat and a freestanding deer stand. Residents

at the property with the boat were contacted by two hard-copy letters: one to request that they move the boat and, after no response, the other was to notify them that VLAWMO staff would move the boat so it is not damaged. VLAWMO staff moved the boat to the construction staging area. Sunram staff are marking and flagging the boat so it is still visible once snow covers the area. Residents at two properties were visited in person regarding the deer stand, one was the property that contained the deer stand; the other was the next-door neighbor. Both OK'd VLAWMO staff moving the deer stand to the construction staging area. A hard-copy letter was sent to the property owner to document the conversation.

A construction update will be provided at the TEC meeting if construction is underway at that time.

The biochar portion of the project remains behind schedule. UMN researchers have not been able to produce a feasible design at this time. VLAWMO staff are coordinating with the SEH to determine the best way to proceed. A full update is not available yet at the TEC meeting, an update will be provided at an upcoming meeting as more information becomes available.

### **B. Great River Greening Update**

VLAWMO is coordinating with Great River Greening, Ramsey County Parks/SWCD, and SPRWS to continue early planning for the funded restoration in Vadnais-Sucker Park. The restoration work for the project is being funded under a 5-year grant with Outdoor Heritage. The project was also included in the portfolio to ENRTF that was not voted on by the legislature during 2020. That would focus on pollinator plantings and could still be approved in 2021. We are delighted to have this level of restoration support at this important park that supports the drinking water supply for St. Paul and surrounding communities.

### **C. Completed Vegetation Surveys for 2020**

RCSWCD completed reports for the shoreline surveys that were completed in 2020 for [East Vadnais](#) and [Sucker Lakes](#). The surveys are linked here and available on the VLAWMO website. These surveys along with the wetland inventory for the park have been shared with ecologists at Great River Greening to provide important information to support restoration efforts.

### **D. 319 update**

VLAWMO is continuing to work with MPCA on 319 preparation materials for funding for possible project proposals around Wilkinson, Tamarack, and Birch Lakes beginning in 2021. Barr Engineering provided the projects and load reductions that resulted from their feasibility study funded by North Oaks Company. These projects have been added to the 319 preparation spreadsheet and shared with MPCA.

### **E. Pleasant Lake planning for 2021**

VLAWMO staff met with a WSB carp expert to continue planning for a harvest next year. WSB is building a proposal to assist in planning and coordination for a carp harvest, specifically they could:

- Coordinate with commercial fishers and work to prioritize harvest in Pleasant

- Coordinate with transport, holding if needed, and shipping to get fish to market
- Assist in implanting radio transmitters to make a harvest more efficient
- Provide vegetation control recommendations to increase success of a harvest

WSB plans to have a proposal for VLAWMO to consider by the end of 2020. It is not ready at the time of packet preparation and will be shared with TEC and Board when it is ready.

VLAWMO is also considering a trial Curly-leaf treatment in Pleasant Lake in partnership with NOHOA and in coordination with SPRWS. That conversation will continue when NOHOA has their budget decisions ready for 2021 (expected in January).

**F. Otter Spotter project live and StoryMap share**

VLAWMO staff will share the new StoryMap during the TEC meeting. Feel welcome to check it out [in advance](#) too by following the link.

Remote-camera monitoring has been going on continuously since mid-July at the Lambert site. Live trapping was completed during Sept. and Oct. Live trapping was not successful due to many constraints at the site. Information gained was valuable and is shared on the StoryMap. To continue learning about otters and monitoring their use of wetland habitats in the watershed, we used the Otter Spotter model from The River Otter Ecology Project in Northern California. We included otter sightings reported and photos from residents in the StoryMap and included map of otter activity. This is a site that we can continue to update over time as VLAWMO staff encounter otter sign in the field and when we receive reports from residents. The site has been popular and had over 200 visits in the first week it was posted.

A report on the project has been submitted to MN DNR. A report is due to the funding partner, the MN Zoo.

Feel welcome to share the Otter Spotter StoryMap with educators and others. VLAWMO Education and Outreach will share this new resource via social media outlets in January.