




BOARD OF DIRECTORS MEETING AGENDA

7:00 PM August 23, 2017

Vadnais Heights City Hall, Council Chambers
800 County Road E, East, Vadnais Heights

- I. **Call to Order**, Chair, Dan Jones
- II. **Approval of Agenda**
- III. **Approval of Minutes** from July 12, 2017
- IV. **Visitors and Presentations**
- V. **New Business**
 - A. Goose Lake shoreline priorities mtg.
- VI. **Old Business**
 - A. Goose Lake treatment design – Kristine/Stephanie
 - 1. Alum treatment dosing proposal 
 - 2. Spent lime pilot project development funding 
 - B. Storm Sewer Utility rate establishment – Res. 02-2017 
 - C. Lambert Creek – Maintenance – Brian
 - D. Consideration of ditch authority legal opinion – Stephanie
- VII. **Operations and Administration - Reports**
 - A. Education & Outreach
 - 1. Summer outreach update
 - 2. Comp plan assistance
 - B. TEC Report
 - C. Finance
 - D. Project Updates
 - 1. Sucker channel restoration project – Kristine
 - 2. Birch Lake project
 - 3. Whitaker Treatment Wetlands – Brian
 - E. Planning – Charley Lake Sustainable Lake Management Plan (SLMP)
- VIII. **Discussion**
 - A. Capstone Project - main chain
 - B. Agenda – Jones
- IX. **Administration Communication** – Project site tour fall/spring ; Mycorrhizal treatment pilot
- XI. **Adjourn**

Next regular meeting: October 25th





MINUTES OF THE BOARD OF DIRECTORS
 July 12, 2017

Attendance		Present	Absent
Dan Jones, Chair	City of White Bear Lake	X	
Jim Lindner, Vice Chair	City of Gem Lake	X	
Rob Rafferty, Secretary-Treasurer	City of Lino Lakes		X
Ed Prudhon	White Bear Township	X	
Marty Long	City of North Oaks		X
Terry Nyblom	City of Vadnais Heights	X	
Stephanie McNamara	Administrator	X	
Kristine Jenson	Program Mgr.	X	
Brian Corcoran	Water Resources Mgr.	X	
Nick Voss	Education & Outreach Cord.	X	
Tyler Thompson	Water Resource Tech.	X	

Others in attendance: Margaret Behrens (Ramsey Conservation District), Mark Graham (City of Vadnais Heights Engineer & TEC Chair), Paul Duxbury (White Bear Township TEC representative), Jeff Moore, Mary Gregory, and Anton Gregory (City of Vadnais Heights residents)

I. Call to Order

The meeting was called to order at 7:00 pm by Chair Jones. A quorum is present for the meeting.

II. Approval of Agenda

A request was made by staff to add Action Items under Goose Lake – Alum Treatment action item to approve funding to do the final design analysis and apply for grants as well as under Birch Lake. Jones would like to add an item under IV.B. - Presentation

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

III. Approval of Minutes from April 26, 2017

A motion was made by Lindner and seconded by Nyblom to approve the minutes from the April 26, 2017 Board of Directors Meeting. Vote: 3 aye, 1 abstain (Prudhon). Motion passed.

IV. New Business

A. Request for legal opinion - consideration of authority and process to assess benefiting area for capital projects

This topic has been discussed with the Finance Committee to determine how we can generate the funds to implement projects. The Joint Powers Agreement (JPA) give us options beyond our current methods which is primarily the Storm Sewer Utility (SSU). We could establish taxing districts to assess properties benefitting from particular projects in the subwatersheds. McNamara feels that if we want to pursue this, we should have our attorney provide input.

Consideration before the Board: Should VLAWMO increase the 2018 legal budget up to \$10,000 in budget to consider clarifying questions on (1) VLAWMO drainage responsibility and (2) the watershed's ability to fund future capital improvement projects (CIPs).

The Members may establish a watershed management tax district for the purposes of paying for the engineering and planning required to make a watershed management plan for that GUF area. Perhaps we could have a Goose Lake GUF or a Lambert Creek GUF? The subwatershed planning in our new Water Plan goes in this direction but we would probably have to take our current very general project plans to a much more fleshed out design level so we would really have better cost

estimates, timelines and maintenance expenses and plans. VLAWMO may need to go through a plan amendment process when big projects are really starting to gel. The language here leaves me a little unsure if there are two different levels of tax districts the members may have, one for planning another for implementation and operations. I don't see an option in the current JPA for VLAWMO to have a Special Tax District, only for our members to have it on our behalf. But I may be missing something.

Possible questions for the attorney:

Our questions for the attorney may fall into two categories, although they are connected. The first has to do with VLAWMO responsibility and authority to manage Lambert Creek (14) and Dillon Ditch (13) and the second has to do with if and how VLAWMO could pay for larger CIPs by subwatershed. Below are possible questions the Board may wish to send to the VLAWMO counsel for his opinion.

1. One of the Duties of the Board (Section VI, Subdivision 5) involves the Transfer of Drainage System. VLAWMO accepted the authority to manage County Ditch 14 (Lambert Creek) and its branches in 1987. This requires VLAWMO to repair, improve, maintain the transferred drainage systems and potentially construct new drainage systems. What is VLAWMO's responsibility and rights under this authority? What is the process for responding to requests for maintenance or improvements?
2. The second area of questions involved funding CIPs that might be needed in the drainage area of the ditches or elsewhere in the watershed. The VLAWMO JPA identifies assessment of subwatershed area as a funding mechanism for capital projects. The affected municipalities would collect the funds through a special assessment process is the current understanding. This would need clarification and discussion with VLAWMO members.

Discussion:

Jones stated that he asked McNamara to look into this because we are looking to do larger projects and while we may get grants, that is not guaranteed, and therefore it is worth discussing the other funding options. Jones stated he doesn't have a problem with adding funds to the Legal budget to look into this more.

Nyblom stated he thinks we should look into this so that we know what our options are.

Prudhon asked if all properties (i.e. residential vs commercial) would be taxed the same with taxing districts. Stephanie stated that would be something the attorney could provide input on. From what she can understand of how the process works, we would assess the communities who would then collect it from the properties.

Lindner stated that he would like to understand how assessments could be fairly spread out within different subwatersheds since our area has portions that have a lot of residential properties close together (such as White Bear Lake) and then areas where there isn't such dense properties.

Jones asked what our actions could be right now. Stephanie stated that she could send the attorney some questions but that if we want to look into this further, we'd need to add money to our budget (which is up for approval tonight) so that we can use their services as we work through this.

Prudhon asked if there were other watersheds that we could talk to in regards to how to handle these projects. Stephanie said she would be reaching out to Rice Creek Watershed regarding drainage management as well as implementing large projects. She also speaks with other watersheds regularly about funding capital improvement projects.

It was moved by Jones and seconded by Prudhon to add \$7000 to the 2018 budget for our attorney to research Ditch Maintenance activities and directs staff to gather more information regarding the funding of large capital improvement projects. Vote: all aye. Motion passed.

B. Presentation of 10 Year Recognition Award to Kristine Jenson

Jones recognized Kristine Jenson for her 10 years of excellent service to VLAWMO and thanked her with an award.

V. Old Business

A. Lambert Creek – Lambert Lake/Pennington – Kohler Flume

Corcoran presented the delineation for the Pennington Place parcels that had come to VLAWMO regarding the water in their backyards. The delineation was completed by Sambatek May 2, 2017. The boundary and type of the wetland as well as wetland jurisdiction has been approved. The delineated area was roughly 0.21 acres total on 4 residential yards along Lambert Creek/Ditch 14. Wetland is a seasonally flooded floodplain. The Corps of Engineers also has jurisdiction over the water resources identified in the delineation report.

Thompson presented his findings from his walk through examination of the ditches in Vadnais Heights on June 14th. The group included Mark Graham, P.E., VH's City Engineer; Kevin Watson, VH's Administrator; Ed Haddon, VH resident; and Tyler Thompson of VLAWMO. The purpose of this walk was to get a visual survey of the ditches, how they were working, and to identify areas in need of maintenance. This inspection took place after a VH Public Works crew cleaned debris out of Branch Ditch 5 and the beginning of 5A, and VLAWMO staff cleared a good deal of tree debris in Ditch 14 between the entry of branch ditch 5 and further downstream to the exit of the first Koehler culvert, however, there are still major trees down and additional debris that should be cleared.

Looking at the Creek/Ditch 14 and branch ditch 5, there was a consensus that while maintenance is needed by means of further branch and tree debris removal, the ditches were flowing well and there were no major blockages or bottlenecks. At the time of inspection, the water level was down along the Pennington Place section of Ditch 14 quite noticeably, correlating with the low rainfall in the first half of June '17. By the 14th of June 2017 we had 1.1 inches of rain, as compared to 4.74 inches on June 14th, 2016. Although, in May of 2017, there was a total of 7.04 inches of precipitation, compared to 2.32 inches in May 2016. Coupled with a very wet fall and into winter of 2016, the system is just now getting its first chance to draw down and dry out since 2015.

The City of Vadnais Heights is looking into tree and debris removal by hiring a contractor to remove obstructions in Ditch 14 to keep it moving at its maximum capacity. Ditch bottom elevations have been found from the last comprehensive cleaning of Ditch 14 from 1987 and processed into GIS data.

Staff is asking for direction from the Board for moving forward.

Discussion:

Lindner stated this sort of thing is a reason for why we may need to find alternative ways to fund projects. Jones stated that he thinks it is a reasonable request to survey the ditch to see how it has changed over the last 30 years. Nyblom stated that there is a 1 foot elevation in the ditch and he wonders if that could be removed to allow for water to stay in the ditch. Nyblom stated that he lived adjacent to the Pennington Place area and the ditch was never as wide as it is today.

Jones stated that we are the ditch authority and it is time to start addressing these issues but we have no budget set for this.

Nyblom feels that maintaining these ditches is a priority, more so than other items that are in the proposed 2018 budget and that he would ask the Board to table approving the budget today so that we could take time to reallocate the budget. Nyblom states that VH residents' basements and backyards are being flooded and that is a priority.

Lindner commented that sometimes a wetland "wants" to be a wetland.

Anton Gregory 738 Pennington Place came forward and pointed on the map how far up the water has come in the backyards. Jones asked how often in the last 5 years has the water been in the yard, Gregory stated that it has been consistently wet through the summer. This year, they have been able to get further

Jeff Moore 714 Pennington Place – he feels that Branch Ditch 5 is causing severe problems that must be addressed now. There is a pipe that isn't draining effectively and there is a lot of debris in the ditch which is not allowing water to move.

Corcoran asked if we are supposed to start doing anything. Jones stated that he cannot give that. The Board suggested that bids for cleaning out the creek and surveying be sought.

B. Goose-Wilkinson study update and next steps

We have received the final report prepared by Greg Wilson, Barr Engineering and Della Young, Young Environmental Consulting Group regarding the feasibility of reducing the nutrient levels in East and West Goose Lakes as well as Wilkinson Lake. Greg and Della presented their preliminary findings at the April Board meeting.

Wilkinson Lake: They feel that the sources of nutrients (phosphorus or TP) for Wilkinson are coming primarily from the wetland complexes north and south of the lake. Wetlands can export TP and the monitoring data we have so far indicates that the levels of this nutrient spike somewhere (Figure 3-5) between Amelia Lake and Ash Street on the northern end of the subwatershed as well as within the stream system coming into Wilkinson from the south. Their recommendation for Wilkinson is to do some site-specific monitoring to ascertain where these “hot spots” might be. If the source can be determined, we could possibly pursue an iron-sand filter project to reduce the TP output. Staff has spoken with Greg to come up with a plan for this monitoring effort.

East & West Goose Lakes: The report states that the primary source of TP in both of the Goose Lake basins is internal and therefore a project such as an alum treatment is what is prescribed to reduce the nutrient levels. Based on Barr’s modeling, if we did an alum treatment on East Goose and it was able to reduce the internal load by 80%, we could be very close to meeting state standards. The modeling shows that with just the East Goose alum application, West Goose’s water quality would improve as well. We could also do alum in West Goose to bring it even closer to standards.

1. Alum Treatment Grant Application

Staff hosted a technical meeting with Goose Lake partners on June 19th and again on June 26th to discuss the next steps and how we can work together to perform an alum treatment for the lake(s). Barr included information for BMPs that could be installed within the subwatershed of Goose Lake but none of them come close to the reduction potential of alum treatment. There is concern, however, that the alum treatment won’t work as well or that it won’t last as long as in other lakes due to the stirring up of the lake bottom that occurs on the Goose Lake basins. However Greg Wilson stated that he was confident that with the proper planning, alum would be the best possible option for us to reduce nutrients in the lakes. In order to be financially able to do an alum treatment, we will need to pursue grant opportunities. And in order to have a competitive application, there is some additional work to be done. According to Barr, they can get us the information we need that will support our grant application(s) at a cost of \$10,000. The major tasks they would do are: 1) Collect 6 sediment cores in both basins and analyze for phosphorus fractionations; 2) Determine alum dosing and develop more accurate cost estimates involving one or more treatment combinations for the basins; 3) Develop a technical memo summarizing the tasks; 4) Prepare supporting information for grant applications.

The partners and VLAWMO staff feel this is a worthy investment in order to have a competitive grant application. VLAWMO asked the partners if they would be willing to provide half of the funds towards this work. The St. Paul Regional Water Service (SPRWS) committed \$5000. Staff is now asking the Board to approve the other \$5000 *to determine proper alum treatment doses and to produce a memo with their results.* The application window for the BWSR Clean Water Fund Grants is now open and closes on August 9th. Staff would like approval from the Board to pursue funding from this grant program and other grant opportunities when they arise.

Staff also requests the Board approve staff pursuing grant opportunities funding the alum treatment at Goose Lake.

It was moved by Nyblom and seconded by Lindner to approve \$10,000, in conjunction with \$5000 from SPRWS to hire Barr for additional alum treatment diagnostic studies.

Vote: all aye

If we are to go for grants which could fund up to 75% of the costs, we would still have to find a match which could be \$125,000-\$160,000. Jones stated this brings up the concern of how we pay for things when our budget doesn't reflect that work. The current budget would have to be increased about 24% which equals about \$8 per homeowner. Nyblom thinks we should wait to apply for grants until next year. Lindner stated he was ok with waiting to apply as well. He feels that from a historical perspective, it isn't urgent. Jones stated that Goose Lake has been discussed for years and there was consensus that it is a priority. He added that pausing for a year would allow more time for community involvement. Prudhon agreed to wait until next year.

The Board directs staff to keep gathering information so that we have a more concrete plan for treating Goose Lake before applying for grants and to work with partners to get their buy-in for local costs.

2. Spent Lime Pilot Project

Barr also suggested trying spent lime to be used in place of alum to bind with phosphorus and make it unavailable for plant growth. Other projects that have used spent lime as a treatment but not as a whole lake application. Projects have used lime or limestone as a part of a filter for stormwater to run through before entering a waterbody. Barr suggested that it could be something we may want to look into further because it would be significantly cheaper since spent lime is available for free from the St. Paul Water Utility or the City of White Bear Lake. There are many unknowns and it would require at least a couple years of research to determine what the effects may be – not just on nutrients but on the whole lake ecosystem. Barr said they could conduct a study with the help of VLAWMO for \$15,000-\$30,000. VLAWMO does not have the budget or man power for this study at the moment. At the June partner meetings, it was agreed that there could be potential for trying this out but there are many things that would need to be worked out and we wouldn't know if it is a truly viable option for a few years. So partners agreed to move ahead with pursuing grants for alum treatment and keep discussing spent lime as an alternative.

Discussion: Jones is intrigued by this idea and would like to pursue it. Stephanie spoke with Greg Wilson about this some more and he feels we could treat West Goose with this and test the effects. Jones would like to add another \$10,000 to the earlier approval to have Barr investigate the use of spent lime on West Goose. This would bring the total amount approved tonight to \$20,000.

It was moved by Jones and seconded by Nyblom to approve an additional \$10,000 to study the use of spent lime as a nutrient reduction option. Vote: all aye. Motion passed.

C. 2018 Budget – Resolution 01-2017

The proposed budget recommended by the Finance committee for 2018 shows an increase from 2018 of \$44,960 which includes \$20,000 of approved grant funding for the Whitaker Wetlands. Removing the Whitaker wetland grant funding the percent increase for 2018 is 6.6%. The grant funding is to cover costs of the first year of monitoring of our treatment wetlands at Whitaker. The amount is an estimate but covered by the LCCMR grant. The storm sewer utility (SSU) fees remain the main source of VLAWMO funding. Rates are proposed to be going up about 6.97%. In 2017 VLAWMO has moved substantially toward a self-sustaining budget that doesn't rely on reserves to subsidize the budgeted expense. Final SSU rates will be available in the August Board materials using updated parcel data and the approved budget. VLAWMO SSU fees remain lower than the taxes charged by our neighboring watersheds.

VLAWMO increased the amount of work accomplished in 2016- 2017 with the GIS watershed technician staff position and the Education and Outreach coordinator. Elements of the new Water Plan are incorporated into this budget. We have several projects in 2017 and 2018 that have leveraged grant funding and partner contributions. \$400,000 (LCCMR grant for Whitaker) +

\$263,000 grant and partner funding for Sucker channel restoration + \$52,000 in State grant money through Ramsey CD for the Kohler streambank stabilization = \$715,000. That literally doubles our budget.

Increases were in areas of IT support, a new office lease, health insurance, and subwatershed priorities. Decreases were in Community Blue grant funds, postponing the Deep Lake feasibility study, project research, maintenance and plan review funding. Please look at the Footnotes for the 2018 budget for further detail.

The Policy and Personnel and the Finance committee have considered the draft 2018 budget and are recommending it with no funding transferred from reserves.

In summary, the total proposed budget is \$715,900 including \$20,000 of the Whitaker Wetland budget. The non-grant project 2018 budget would be \$695,900 compared to the 2017 budget of \$650,140. We will not know the final 2017 expenditures until February 2019.

Discussion: Prudhon asked if there were any items that could be trimmed or postponed. Stephanie responded that all budget items were evaluated and trimmed where possible.

Nyblom asked about the \$54,000 in the landscape grant program and this money could be better spent on ditch maintenance. Staff explained the popularity of the landscape grant programs and that they are both an educational tool as well as a water quality benefit. Lindner stated that he feels these programs are important and he feels it is a disservice to not have it. Jones stated that Ramsey Washington Metro Watershed has a very competitive grant program. He considers it is an effective marketing tool. The program is spreading best management practices & stewardship.

Nyblom said that if the budget is approved tonight and in a month we get information regarding costs for ditch maintenance, would we be locked into not being able to fund the work? Lindner said that our budget lacks a contingency fund to handle emergencies such as a storm causing damage that needs to be dealt with.

Nyblom also asked what the money in the Gilfillan-Tamarack-Black budget item was for. Stephanie said that was for the increased monitoring in Wilkinson and possibly planning for a BMP. Nyblom asked about the Birch Lake line item. Stephanie stated that is for a project that will be discussed a little later in the agenda.

Jones recommended a 5% increase over the proposed help fund a plan for our bigger projects. This would be roughly a \$35,000 increase to the budget. Prudhon agreed saying that the effects of the increase are relatively small and the reality is that water and projects are expensive.

Jones stated that our budget and SSU rates stayed low through the recession and current increases are reflection of the cost of business. The Chair noted that the earlier study approvals add \$20,000 to the budget and with an additional \$35,000 for ditch management (Lambert Creek subwatershed) which would bring the budget to \$771,400.

Stephanie explained that if they don't approve a budget tonight, we will have to have a special meeting in September in order to develop the 2018 SSU rates.

It was moved by Jones and seconded by Prudon to approve Resolution 01-2017 regarding the approval of the 2018 budget for \$771,400. Vote: all aye. Motion passed.

Resolution 01-2017

Of the Vadnais Lake Area Water Management Organization (VLAWMO)

Approving the 2018 Budget

The Board of Directors of the Vadnais Lake Area Water Management Organization met in a regular meeting at the Vadnais Heights City Hall on Wednesday, the 12th day of July, 2017 at 7:00 o'clock p.m.

The following members were present:

Jones, Lindner, Nyblom, Prudhon

The following members were absent: Rafferty, Long

Resolution 01-2017 was moved by Director Jones and seconded by Director Prudhon :

Whereas, the Board of the Vadnais Lake Area Water Management Organization has considered the 2018 draft Budget as recommended by the Finance Committee, the Technical Commission and the attendant information. The 2018 budget and footnotes are attached to this Resolution, and

Whereas, the income and expenses of the for the 2018 budget, inclusive of grant funding for the Whitaker Wetlands project received will be \$771,400.

Therefore be it resolved that the 2018 Budget, dated 7-12-2017 is approved.

Vote: Aye: 4
Nay: 0; Abstain: 0

D. Whitaker Treatment Wetlands construction contract

At the April meeting the Board authorized proceeding with the RFP for the Whitaker Treatment Wetlands construction and to have staff bring a contractor recommendation to the next Board meeting. Six bids were received for the project ranging from \$217,250 to \$354,000. The engineer's estimated cost was \$247,000.

Staff asked our engineers, Burns & McDonnell, to conduct an evaluation of the bids received and to give a letter of recommendation for the lowest qualified bidder. Attached you will find the *VLAWMO Bid Recommendation Memorandum* which also includes the breakdown of each bid.

VLAWMO staff, along with our engineer Burns & McDonnell, recommend approval of the low bidder, Belair Builders, Inc. as the Whitaker Treatment Wetlands construction contractor.

Staff requests approval to of the contract with Belair Builders for the Whitaker Treatment Wetlands construction at a cost not to exceed \$217,250.

Discussion: Prudhon asked when it will start. Corcoran stated they would want to break ground October 2 and would be completed in 4-6 weeks.

It was moved by Jones and seconded by Lindner to approve the hiring of Belair Builders with a proposal of \$217,250 to perform the construction of the Whitaker Treatment Wetlands project. Vote: all aye. Motion passed.

VI. Operations and Administration - Reports

A. TEC Report to the Board

Mark Graham, TEC Chair, summarized activities from the TEC.

Graham stated that the City bears some of the responsibility for the maintenance of the ditch and they will be working on cleaning the ditch and working with VLAWMO staff.

B. Finance

The financial picture is in reasonable shape. While reserves remain low, they are proving adequate. The Whitaker treatment wetland grant has paid out twice and the Kohler project grant funding is expected shortly. Receiving these payments allows VLAWMO to pay incoming bills on current work. The first payment of the Storm sewer utility fees for 2017 is anticipated the first week of July from Ramsey and Anoka Counties. Requested and received was a \$50,000 advance in May to make sure we had enough to cover June bills. In reviewing the bank statements for the June report it became apparent that our long-time municipal savings account at US Bank was no longer a good financial instrument for VLAWMO. We were earning, on average, \$0.24/month on \$58,000 and the bank had started charging a \$5/month service charge. After talking to the banker, I had them roll those funds into VLAWMO's checking account. So now instead of 0.00498%, the funds will be earning 0.56% interest with no \$5 service charge. The TEC report shows no funds in the Reserve Savings. The account has been closed. The money is in the 4M and 4M Plus accounts.

Also of note, is that our bookkeeper of the last year has accepted a new job for the City of Afton and is no longer with VLAWMO. After talking over the options with Kristine and our auditor, Chris Knopik, we plan to try the bookkeeping in house. The June report is our first effort and I think it is going well so far. Your comments or requests for information are welcome.

C. Project Updates

1. Sucker Channel restoration project

The Joint Powers Agreement between VLAWMO, Ramsey County Parks, Ramsey Conservation District, and the St. Paul Regional Water Service has been approved and signed by all the respective Boards and the project is now in the final planning phases and should go out for bid this summer and construction to begin in the fall.

2. Birch Lake

Staff received the technical memo from Barr Engineering regarding the installation of a BMP at the intersection of 4th and Otter Lake Road which outlets to Birch Lake.

Staff requests approval from the Board to pursue grant opportunities to help fund this project.

It was moved by Lindner and seconded by Prudhon to direct staff to pursue working with partners and applying for grants to help fund this project. Vote: all aye. Motion passed.

D. Education and Outreach

1. Community Outreach Update

Events: VLAWMO held a booth at the Saint Paul Regional Water Service (SPRWS) open house, the Vadnais Heights Economic Development Expo, the North Oaks Community Fair, and the White Bear Lake Water Symposium (school district). Nick presented VLAWMO's activities, opportunities, and data on Birch Lake to the Birch Lake Improvement District (BLID) annual meeting.

Partnerships: Sunrise Park Middle School, Urgency Room/Allina Nurses, and Eagle Scouts have been active in Storm drain Stenciling. Macroinvertebrate (water bugs) workshops have taken place with AFSA high school, Vadnais Heights summer day camp, and the WaterJourney summer camp (Hamline University). Public water bugs workshops are in planning stages.

Raingarden Clean-ups: Recent raingarden clean-ups have taken place with help from students and Watershed Action Volunteers (WAV) members. Maintained gardens included Vadnais Heights Elementary, Lakeaires Elementary, Gem Lake Heritage Hall, and Children's Discovery Academy.

2. Storm pond/wetland buffers

A series of documents have been developed in an effort to create understanding on buffers and policies pertaining to them in the VLAWMO Water Plan. Each document pertains to various audiences with varying degrees of detail, creating a gradient of ways to become more familiar with the water policy. Target audiences include the public, city staff and select city officials and developers.

E. Landscape Level 2 Grant Application Considerations

1. L2-2017-01: Pines of North Oaks

The Pines of North Oaks (LL2-2017-01) is a home association within North Oaks and they are asking for assistance to upgrade their existing irrigation system on their property from a conventional controller to a "smart" controllers which monitors daily weather conditions and provides adjustments to the system. They will be using two different types of "smart" controllers. There are 7 irrigation zones on the property. They plan to install the Rainbird IQ system at two most heavily used zones which they expect will reduce water use by 20-40%; the other five locations will use a Wireless Solar Sync system will provide 10-15% water use reduction. Cost of the Rainbird system is \$6555 each while the Solar system will cost \$410 for each for the other 5 zone. If the Rainbird systems are as successful as they predict, they

hope it will convince the association to invest in more of them – not only from a financial standpoint (they claim that their water bill is one of their largest expenses) but also for the positive environmental impact as well. The total cost of this project is \$15,165 and they are requesting a grant of \$11,375. The TEC recommends approval of this grant for \$10,000. It was moved by Lindner and seconded by Prudhon to approve L2-2017-01 in the amount of \$10,000. Vote: all aye. Motion passed.

2. Cabin 61 (LL2-2017-02) is the site of what was formally known as “The Little Bar” on West Goose Lake. The business entity that owns the property is Little Goose Development Corp which is made up of members of the Ski Otters Club. They have done extensive work to rehabilitate the bar and restaurant, as well as the rental cottages next door. They would like to work on the landscape now and implement projects that will capture most of the stormwater runoff that would otherwise go into West Goose. They are working with HabAdapt which is a landscaping company that has done other successful projects in the watershed. They have initial designs and will be finalizing their plans and completing the installation later this summer and fall.

The grant would be used for approximately 4000 sq ft of shoreline buffer plantings and 700-1000 sq ft of raingardens. The applicant has expressed their desire to do their part to help enhance West Goose Lake, which is one of our impaired waters and is a priority for restoration for the watershed.

The applicant expects to spend \$30,000 on this project and are asking for a \$20,000 grant. The TEC recommends approval of this grant for \$20,000.

Discussion: Nyblom thinks \$20,000 for a grant to a commercial business is a lot. Jones stated that the ownership group is the Ski Otters and he does not appreciate what they have done to the public shoreline to the south including adding sand to the shore which continuously erodes into the lake. So for them to ask for money to enhance the piece of land they own is duplicitous. Lindner stated that the public sees the strip of land that they have destroyed and not the area that they now own.

It was moved by Prudhon and seconded by Nyblom to deny L2-2017-02 in the amount of \$20,000. Vote: all aye. Motion passed.

VII. Discussion

A. Agenda

Jones discussed how he would like the agenda changed in the future. He would add an item called Visitors and Presentations further up the agenda.

Nyblom said that we could consider using grant funds for ditch maintenance.

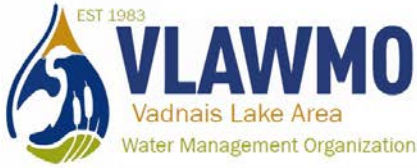
VIII. Administration Communication

IX. Public Comment

X. Adjourn

A motion was made by Lindner and seconded by Jones to adjourn at 9:27pm. Vote: all aye. Motion passed.

Minutes compiled and submitted by Kristine Jenson.



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To: the Board of Directors
From: Stephanie McNamara
Re: Goose Lake Shoreline meeting

While chemical treatments such as alum and spent lime are being evaluated, there remains active erosion on the western shore of West Goose and in the eastern Polar dealership channel. Restoration designs have been made and as yet remain unimplemented. It has been suggested that a meeting of key parties interested in Goose Lake could be useful. On the agenda would be identifying common goals, the roadblocks to progress and possible common priorities for moving forward. There are several stakeholders in this discussion and there are questions to be resolved. The meeting could be held this fall if the Board wishes. **Staff is seeking Board direction on if VLAWMO should facilitate such a meeting and what are VLAWMO's priorities for the shoreline.**

Questions for VLAWMO Board consideration:

- Are some areas of the Goose Lake shoreline in need of stabilization?
- Which areas are in need of stabilization?
- Are there priority areas?
- What have been the hurdles in the past to shoreline stabilization?
- Who owns the priority areas?
- Would some stabilization areas count toward Waste Load Allocations for Stormwater Permits?
- Is there a consensus vision to move forward with?
- What does the VLAWMO Water Plan say?

The following letter could be sent to interested parties.

Local groups and agencies interested in Goose Lake are invited to participate in a discussion focused on the Goose Lake shoreline. This meeting will be facilitated as a circle style discussion.

Stakeholders include:

City of White Bear Lake
Ski Otters
DNR
Ramsey County Public Works
Mn Dot
VLAWMO



Format:

Reframing:

- Definition of common goals for the lake.
- Any complex situation or conflict has aspects that are “stuck” and aspects that are “flexible”. A clear outline of these will support lasting progress for the lake, and can help improve communication habits for future projects and focuses.

Current situation:

- Applying the reframing to the current circumstances.
- Definition of common goals for the shoreline.
- Gathering questions from stakeholders
- What answers do we have? What information is still needed?

Recap & next steps:

- Definition of short term action items. Long range aspirations.
- Outline partner responsibilities. Recap shared vision.



To: The Board of Directors

From: Kristine Jenson & Stephanie McNamara

Re: **VI.A.1** Goose Lake Treatment design AND
VI.A.2 Spent lime pilot project development - funding

At the last meeting of the VLAWMO Board there was direction to proceed with securing proposals for alum dosing analysis and design for Goose Lake. There are two proposed agreements before the Board, one to hire Barr Engineering to do the analysis and design for an alum treatment and another with the St. Paul Regional Water Service to accept their contribution of \$5000 to help pay for this work.

1st Agreement: with Barr Engineering

Staff contacted Greg Wilson of Barr Engineering for a proposal to do the follow-up alum treatment design. This proposed agreement is included in your packet. The scope of the work would include sediment cores of both East and West Goose, development of alum dosage and an application plan and a Technical memorandum. Preparation of supporting information for a State grant application is included. That work would be done for \$10,000.

After discussion with the City of White Bear Lake engineering staff and Barr, one additional testing site was added as an option for Board and partner consideration. Oak Knoll pond is south of Goose Lake and part of its drainage area. Adding sediment monitoring of this pond as a potential spent lime pilot project to this proposal would allow VLAWMO and its partners to evaluate the spent lime pilot in as a treatment option. The additional sediment coring and analysis would cost \$2000. Having this information positions VLAWMO to do a robust spent lime pilot study if the Board chooses to do so.

Recommendation: staff recommends approval of the Barr Engineering 'Agreement for Sediment Phosphorus Monitoring of Goose Lake and Oak Knoll Pond' with the Oak Knoll option for a total cost of \$12,000. There are carry over funds from 2016 to address impaired waters and Lambert Creek that can fund the \$7000 cost to VLAWMO.

2nd Agreement: with St. Paul Regional Water Service for a Goose Lake Sediment Analysis and Alum Dosing Study

The St. Paul Regional Water Service (SPRWS) has been a part of the technical team studying the possibility of alum or spent lime treatment of Goose Lake. They have been an active partner with VLAWMO since the beginning of the watershed. When the feasibility study for Goose and Wilkinson was completed and it became apparent that additional work was needed to bring a treatment plan to a final design, VLAWMO discussed work

and how it would be funded with its partners. SPRWS stepped forward offering to pay \$5000 toward the above study.

Recommendation: staff recommends approval of the Agreement between the Vadnais Lake Area Water Management Organization and the Board of Water Commissioners of the City of Saint Paul for Goose Lake Sediment Analysis and Alum Dosing Study.

VI.A.2 Spent lime pilot project development funding

Staff understood there to be staff direction to pursue what would be involved in a pilot spent lime study as an alternative to alum treatments for phosphorus reduction. An additional \$10,000 was added to the 2018 budget help fund spent lime pilot project development. Two issues were apparent: one was funding amount and timing and the other was potentially completing necessary summer monitoring that could be used in a winter analysis and pilot development.

To deal with the second issue – was there information that needed to be collected in the summer if a pilot project plan was developed in the winter? Yes, sediment coring in Oak Knoll pond would be needed as well as intensive late summer water quality monitoring. . The control basin is useful to clarify whether or not the spent lime is effective when some of the unique variables on West Goose (higher wind stirring and intensive use by water skiers) are removed. The sediment coring could be done if the Board approves the option on the Barr Agreement to do the Oak Knoll sediment work (\$2000). VLAWMO staff has discussed the water sample collection and this could be added to the existing monitoring. Lab analysis of those samples would be about \$1200.

The original very rough estimate from Barr to develop this pilot project which would now involve treating West Goose Lake and Oak Knoll pond as a control basin was \$15,000 - \$35,000. We don't have a defined proposal from Barr with a solid cost at this time. Work on this portion of the possible treatment design could be delayed until 2018 when the \$20,000 would be available. Of course we aren't sure if this will be enough. But we could go to our partners again or redirect additional VLAWMO funds.

An additional funding source within the VLAWMO budget might be to use the \$20,000 Landscape Level 2 grant that was not approved last month. No new applicants are interested in these funds at this time. Currently those funds will go into restoring the VLAWMO general fund at the end of the year. At the Boards discretion some or all of that grant funding could be shifted to the Goose Lake Subwatershed line item which would make it available this fall for pilot project development or it could be carried over for future shoreline restoration or chemical treatment needs.

Board direction request: Does the Board wish to reallocate the remaining \$20,000 in the 2017 LL2 grant program to the Goose Lake subwatershed for use plan development?

August 10, 2017

Ms. Stephanie McNamara
Administrator
Vadnais Lake Area Water Management Organization (VLAWMO)
800 County Road E East
Vadnais Heights, MN 55127

Re: Agreement for Sediment Phosphorus Monitoring of Goose Lake and Oak Knoll Pond

Dear Ms. McNamara:

Thank you for the opportunity to submit this agreement to provide engineering services to the Vadnais Lake Area Water Management Organization (VLAWMO) for sediment monitoring and aluminum sulfate (alum) dosing for Goose Lake, and optionally, Oak Knoll Pond to improve the lake/pond and downstream lake water quality.

This engineering estimate includes sediment core collection/analysis, determination of an alum dosage plan, technical memorandum and preparation of supporting information for a BWSR grant application. Table 1 summarizes the work items and the estimated cost.

Project Scope

The project includes the following work tasks.

1. Sediment core collection and phosphorus fractionation

Sediment core collection and phosphorus fractionation are essential to understanding the potential for phosphorus release for bottom sediment that can spur algal blooms and water quality problems. Currently, there is data for just one existing sediment core sampling site on Goose Lake. For this project, sediment cores will be collected from four locations in East Goose Lake and two locations in West Goose Lake. Sediment cores will be collected during October or November, 2017 if safe working conditions allow. The bottom depth of the core will vary depending on how far the coring tube can be pushed into the sediment at each location.

For this task, we will fractionate the sediment core samples to extract and accurately identify/target the forms of phosphorus that are contributing to internal loading each summer, and subsequently determine the implications for control. Iron-bound phosphorus, organic phosphorus, aluminum-bound phosphorus, and calcium-bound phosphorus will be extracted and analyzed separately. Iron-bound and loosely-sorbed phosphorus are the forms of phosphorus that can most readily contribute to internal loading of phosphorus within a water body. Anoxic conditions (i.e. low oxygen levels) at the sediment interface will convert iron in the sediment to a soluble form, releasing phosphorus that was previously bound to insoluble iron. Organic phosphorus can also contribute to internal loading of biologically available phosphorus. Under normal conditions, aluminum-bound and calcium-bound phosphorus in the sediment do not contribute to internal loading of biologically available phosphorus. Our analysis of the sediment

cores will provide the data needed to calculate of the optimal alum dose to reduce internal phosphorus loading from each water body.

2. Development of an alum dosage and application plan

Our analysis of the sediment cores will provide the areal data needed to calculate the optimal alum dose for each water body to reduce internal phosphorus loading. Based on the amount of mobile phosphorus (the pool that contributes to internal loading) in the sediment, an alum dose will be calculated that will reduce internal loading to the desired goal. Another factor that will be considered in calculating the alum dose is the amount of labile (easily broken down) organic phosphorus in the sediment. This form of phosphorus is not immediately available for use by algae but will break down over time and increase the mobile phosphorus pool in the sediment. The addition of this phosphorus pool into the dosing calculation will ensure that an alum dose is added to each water body that will effectively control internal phosphorus loading for an extended period of time.

Water chemistry will also need to be considered when developing the application plan. If the alum dose is high enough, it is possible that there will be insufficient alkalinity in the lake/pond to buffer the treatment and prevent pH depression below 6.0. Historical data, along with water chemistry data collected before treatment will be used to model the maximum allowed alum dose to prevent pH depression in the lake. This information, along with the information on morphometry, will be used to develop a safe and effective application plan that will achieve maximum phosphorus inactivation. If necessary, the recommended alum dosing procedure will indicate whether the treatment should be done in conjunction with a buffering agent.

For this task Barr will produce mapping of the mobile and organic phosphorus fractions across each lake. Once a dose has been developed, morphometric information for the lake/pond (mean depth and surface area) will be used to determine if the alum dose should be buffered or applied over a number of treatments as opposed to a one-time treatment.

3. Technical memorandum

All of the results of the above tasks will be summarized in a technical memorandum and submitted for review and comment. This memorandum will include all calculations used to derive the bid quantities that can be supplied to alum application contractors, as well as a map that indicates the alum dosing rates that should be applied to each water body. Barr will respond to questions and comments and finalize the technical memorandum.

4. Preparation of supporting information for BWSR grant application

All of the pertinent results of the above tasks will be compiled and sent to VLAWMO staff in an email for incorporation into a BWSR grant application, including an engineer's estimate of alum treatment cost that would cover final design, contracting, oversight and project assurances.

5. Sediment Monitoring of Oak Knoll Pond (Optional)

VLAWMO staff are discussing/pursuing water quality monitoring in Oak Knoll Pond during the late summer/fall of 2017, which may determine that there is a need to conduct the same sediment monitoring and assess whether sediment phosphorus release from the pond will need to be immobilized. This task is included as an option to add one sediment core monitoring location from Oak Knoll Pond to the work

scope and include the development of the same Task 1 through Task 4 deliverables for this location in the overall project.

Estimated Cost and Schedule

The following table summarizes the estimated costs associated with each task described in the scope of services and list of assumptions.

The table also shows the estimated schedule for the completion of the project tasks. The schedule assumes authorization to proceed by VLAWMO no later than September 1, 2017. The actual schedule will be coordinated with VLAWMO staff and will accommodate coordination with public and private landowners for lake/pond access, where applicable.

Task	Description of Task	Amount	Estimated Completion
1	Sediment core collection and phosphorus fractionation	\$ 4,000	December 2017
2	Development of alum dosage and application plan	\$ 2,000	January 2018
3	Technical memorandum	\$ 3,000	February 2018
4	Preparation of supporting information for BWSR grant application	\$ 1,000	March 2018
5	Sediment Monitoring of Oak Knoll Pond (Optional)	\$ 2,000	Same as above for respective task deliverables
Total Estimated Project Cost		\$ 12,000	

This Agreement will be effective for the duration of the services, unless earlier terminated by either VLAWMO or us. We will commence work on Task 1 upon receipt of a copy of this letter signed by your authorized representative.

We will inform you of our progress through periodic (e.g., bi-weekly) e-mail updates, telephone calls, invoice details, and other communications.

For the services provided, you will pay us on a lump sum basis, according to the attached Standard Terms. We will bill the VLAWMO approximately monthly. The cost of the services will not exceed \$10,000 (or \$12,000 including optional Task 5) without prior approval by the VLAWMO. Work beyond the scope outlined above will be billed on a time-and-expense basis in accordance with our fee schedule, following your written permission or otherwise negotiated with you.

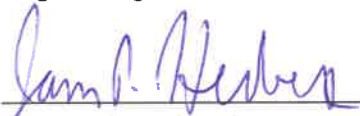
We understand you or your designees have the authority to direct us. We will direct communications to you at the 800 County Road E East address. Direction should be provided to Greg Wilson at the letterhead address.

During the term of this Agreement, we will maintain the following insurance coverages:

Worker Compensation Statutory
Employer Liability \$500K per claim/\$500k aggregate
Commercial General Liability \$1M per claim/\$2M aggregate, combined single limit
Automobile \$1M combined single limit
Umbrella/excess policy as to above coverages \$10M aggregate
Professional Liability (claims-made)..... \$5M per claim/\$5M annual aggregate

If this Agreement is satisfactory, please sign the enclosed copy of this letter in the space provided, and return it to us.

Sincerely yours,
Barr Engineering Co.

By  _____
Henry M. (Hal) Runke, Ph.D.
Vice President

Accepted this ___ day of _____, 2017

Vadnais Lake Area Watershed Management Organization

By _____
Stephanie McNamara
Its District Administrator

Attachments
Standard Terms—Professional Services



STANDARD TERMS—PROFESSIONAL SERVICES

Our Agreement with you consists of the accompanying letter or other authorization, Work Orders, and these Standard Terms – Professional Services.

Section 1: Our Responsibilities

- 1.1 We will provide the professional services (“Services”) described in this Agreement. We will use that degree of care and skill ordinarily exercised under similar circumstances by reputable members of our profession practicing in the same locality.
- 1.2 We will select the means, methods, techniques, sequences, or procedures used in providing our Services. If you direct us to deviate from our selections, you agree to hold us harmless from claims, damages, and expenses arising out of your direction.
- 1.3 We will acquire all licenses applicable to our Services and we will comply with applicable law.
- 1.4 Our duties do not include supervising your contractors or commenting on, supervising, or providing the means and methods of their work unless we accept any such duty in writing. We will not be responsible for the failure of your contractors to perform in accordance with their undertakings.
- 1.5 We will provide a health and safety program for our employees, but we will not be responsible for contractor, job, or site health or safety unless we accept that duty in writing.
- 1.6 Estimates of our fees or other project costs will be based on information available to us and on our experience and knowledge. Such estimates are an exercise of our professional judgment and are not guaranteed or warranted. Actual costs may vary. You should add a contingency.
- 1.7 The information you provide to us will be maintained in confidence except as required by law.

Section 2: Your Responsibilities

- 2.1 You will provide access to property as required.
- 2.2 You will provide us with prior reports, specifications, plans, changes in plans, and information about the project which may affect the delivery of our Services. You will hold us harmless from claims, damages, and related expenses, including reasonable attorneys’ fees, involving information not timely called to our attention or not correctly shown on documents you furnished to us.
- 2.3 You agree to provide us with emergency procedure information and information on contamination and dangerous or hazardous substances or processes we may encounter in performing the Services.
- 2.4 You agree to hold us harmless as to any claim that we are an owner, operator, generator, transporter, treater, storer, or a disposal facility within the meaning of any law governing the handling, treatment, storage, or disposal of dangerous or hazardous materials.
- 2.5 Site remediation services may involve risk of contamination of previously uncontaminated air, soil, or

water. If you are requesting that we provide services that include this risk, you agree to hold us harmless from such contamination claims, damages, and expenses, including reasonable attorneys’ fees, unless the loss is caused by our negligence.

- 2.6 You agree to make disclosures required by law. If we are required by law or legal process to make such disclosures, you agree to hold us harmless and indemnify us from related claims and costs, including reasonable attorneys’ fees.

Section 3: Reports and Records

- 3.1 We will retain analytical data relating to the Services for seven years and financial data for three years.
- 3.2 Monitoring wells are your property and you are responsible for their permitting, maintenance and abandonment unless we accept that duty in writing. Samples remaining after tests are conducted and field and laboratory equipment that cannot be adequately cleansed of contaminants are your property. They will be discarded or returned to you, at our discretion, unless within 15 days of the report date you give written direction to store or transfer the materials at your expense.
- 3.3 Our reports, notes, calculations, and other documents, and our computer software and data are instruments of our Services, and they remain our property, subject to a license to you for your use in the related project for the purposes disclosed to us. You may not use or transfer our reports to others for a purpose for which they were not prepared without our written approval. You agree to indemnify and hold us harmless from claims, damages, and expenses, including reasonable attorneys’ fees, arising out of any unauthorized transfer or use.
- 3.4 Because electronic documents may be modified intentionally or inadvertently, you agree that we will not be liable for damages resulting from change in an electronic document occurring after we transmit it to you. In case of any difference or ambiguity between an electronic and a paper document, the paper document shall govern. When accepting document transfer in electronic media format, you accept exclusive risk relating to long-term capability, usability, or readability of documents, software application packages, operating systems, and computer hardware.
- 3.5 If you do not pay for the Services in full as agreed, we may retain reports and work not yet delivered to you and you agree to return to us our reports and other work in your possession or under your control. You agree not to use or rely upon our work for any purpose until it is paid for in full.

Section 4: Compensation

- 4.1 You will pay for the Services as agreed upon or according to our then current fee schedules if there is no other written agreement as to price. An estimated cost is

not a firm figure unless stated as such and you should allow for a contingency in addition to estimated costs.

- 4.2 You agree to notify us of billing disputes within 15 days and to pay undisputed portions of invoices within 30 days of invoice date. For balances not paid under these terms, you agree to pay interest on unpaid balances beginning 10 days after invoice date at the rate of 1.5% per month, but not to exceed the maximum rate allowed by law.
- 4.3 If you direct us to invoice another, we will do so, but you agree to be responsible for our compensation unless you provide us with that person's written acceptance of the terms of our Agreement and we agree to extend credit to that person.
- 4.4 You agree to compensate us in accordance with our fee schedule if we are asked or required to respond to legal process arising out of a proceeding to which we are not a party.
- 4.5 If we are delayed by factors beyond our control, or if the project conditions or the scope of work change, or if the standards change, we will receive an equitable adjustment of our compensation.
- 4.6 In consideration of our providing insurance to cover claims made by you, you hereby waive any right of offset as to payment otherwise due us.

Section 5: Disputes, Damage, and Risk Allocation

- 5.1 Each of us will exercise good faith efforts to resolve disputes without litigation. Such efforts will include a meeting attended by each party's representative empowered to resolve the dispute. Disputes (except collections) will be submitted to mediation as a condition precedent to litigation.
- 5.2 We will not be liable for special, incidental, consequential, or punitive damages, including but not limited to those arising from delay, loss of use, loss of profits or revenue, loss of financing commitments or fees, or the cost of capital. Each of us waives against the other and its subcontractors, agents, and employees all rights to recover for losses covered by our respective property/casualty or auto insurance policies.
- 5.3 We will not be liable for damages unless you have notified us of your claim within 30 days of the date of your discovery of it and unless you have given us an opportunity to investigate and to recommend ways of mitigating damages, and unless suit is commenced within two years of the earlier of the date of injury or loss and the date of completion of the Services.
- 5.4 For you to obtain the benefit of a fee which includes a reasonable allowance for risks, you agree that our aggregate liability will not exceed the fee paid for our services or \$50,000, whichever is greater, and you agree to indemnify us from all liability to others in excess of that amount. If you are unwilling to accept this allocation of risk, we will increase our aggregate liability to \$100,000 provided that, within 10 days of the date of our Agreement, you provide payment in an amount that will increase our fees by 10%, but not less than \$500, to compensate us for the greater risk undertaken. This

increased fee is not the purchase of insurance.

- 5.5 If you fail to pay us within 60 days following invoice date, we may consider the default a total breach of our Agreement and, at our option, we may terminate all of our duties without liability to you or to others.
- 5.6 If we are involved in legal action to collect our compensation, you agree to pay our collection expenses, including reasonable attorneys' fees.
- 5.7 The law of the state in which the project site is located will govern all disputes. Each of us waives trial by jury. No employee acting within the scope of employment shall have any individual liability for his or her acts or omissions and you agree not to make any claim against individual employees.

Section 6: Indemnification

- 6.1 Each of us will indemnify and hold harmless the other from and against demands, damages, and expenses to the comparative extent they are caused by the negligent acts, omissions, or breach of contract of the indemnifying party or of those others for whom the indemnifying party is legally responsible.
- 6.2 To the extent that may be necessary to indemnify either of us under Section 6.1, you and we expressly waive, in favor of the other only, any immunity or exemption from liability that exists under any worker compensation law.

Section 7: Miscellaneous Provisions

- 7.1 We will provide a certificate of insurance to you upon request. Any claim as an Additional Insured shall be limited to losses caused by our sole negligence.
- 7.2 This Agreement is our entire agreement, and it supersedes prior agreements. Only a writing signed by both of us making specific reference to the provision modified may modify it.
- 7.3 Neither of us will assign this Agreement without the written approval of the other. No other person has any rights under this Agreement.
- 7.4 A writing may terminate this Agreement. We will receive an equitable adjustment of our compensation if our work is terminated prior to completion as well as our fees and expenses on the basis agreed upon through the effective date of termination.
- 7.5 We will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, religion, age, genetic information, marital status, sexual orientation, gender identity, familial status, disability, status with regard to public assistance, membership or activity in a local human-rights commission, or status as a protected veteran. We will take affirmative action to ensure that applicants are considered, and employees are treated during their employment, without regard to those factors. Our actions will include, but are not limited to notifications, hiring, promotion or employment upgrading, demotion, transfer, recruitment or recruitment advertising, layoffs or terminations, rates of pay and other forms of compensation, and selection for training or apprenticeship.

End of Standard Terms

AGREEMENT
between
VADNAIS LAKE AREA WATER MANAGEMENT ORGANIZATION
and
BOARD OF WATER COMMISSIONERS OF THE CITY OF SAINT PAUL
for
GOOSE LAKE SEDIMENT ANALYSIS AND ALUM DOSING STUDY

This **AGREEMENT** (“Agreement”) is entered into this ___ day of _____, 2017 by and between the Vadnais Lake Area Water Management Organization (“VLAWMO”) and the Board of Water Commissioners of the City of Saint Paul (“Board”).

R E C I T A L S

- A. East and West Goose Lakes are located in the City of White Bear Lake, Ramsey County.
- B. Goose Lake is on the State of Minnesota Impaired Waters List for high nutrient levels, primarily in the form of Total Phosphorus (“TP”) and a Total Maximum Daily Load (“TMDL”) Study, along with further analysis, indicates that the largest source of TP loading is coming from internal sources (i.e., the sediment of the lake basins).
- C. VLAWMO made a commitment in its 2017 10-Year Watershed Management Plan to prioritize the reduction of TP in East and West Goose Lakes and is working with Barr Engineering Co. to conduct continued analysis for the most beneficial Best Management Practices for TP reduction. Their determination is that if the proper alum treatment is applied to both lakes, the TP levels would be substantially lowered, potentially enough to meet or exceed State standards, which would remove them from the Impaired Waters List.
- D. Because the Goose Lake basins feed into Lambert Creek, which outlets into East Vadnais Lake, the Board’s final raw water reservoir, a reduction in the basins’ TP levels is in the interest of the Board.
- E. In order to determine the proper alum dosing requirements and develop a more accurate cost estimate for the alum treatment, Barr Engineering Co. proposed to conduct the additional sediment analysis at a cost of \$10,000. VLAWMO requested contributions from its partners and the Board offered to contribute \$5,000 toward the cost of the analysis.

TERMS

Accordingly, in consideration of the mutual terms and conditions, promises, covenants and payments hereinafter set forth, VLAWMO and the Board (the “Parties”) agree as follows:

- 1. VLAWMO will contract with Barr Engineering Co. to provide analysis of sediment in East and West Goose Lakes to determine proper protocols for alum treatment at a cost of \$10,000 and VLAWMO will pay all costs associated with said analysis.

2. Within 30 days of receipt of evidence of payment, the Board will pay VLAWMO the sum of \$5,000 to partially defray the cost. This amount is fixed and does not depend on actual contract price.

3. Liability

a. Each Party agrees that it will be responsible for its own acts and omissions and the acts and omissions of its officers and employees, and any liability resulting therefrom, to the extent authorized by law. No Party shall be responsible for the acts of the other and/or the results thereof.

b. Each Party will maintain workers' compensation insurance or self-insurance coverage, covering its own employees while they are providing assistance pursuant to this Agreement.

c. Notwithstanding the foregoing, the terms of this Agreement are not to be construed as, nor operate as, waivers of a Party's statutory or common law immunities or limitations on liability, including, but not limited to, Minnesota Statutes Chapter 466. Further, each Party's obligations set forth in this Article and otherwise in this Agreement, and the results thereof, are expressly limited by the provisions of Minnesota Statutes Chapter 466, Minnesota Statutes Chapter 604, Minnesota Statutes Section 471.59, and any other applicable law or regulation providing limitations, defenses or immunities to the Parties.

4. The above Recitals are incorporated into this Agreement as terms hereof.

5. This Agreement shall be in effect beginning on the date of the last signature and shall remain in force and effect until December 31, 2017, or until VLAWMO has received the Board's payment described in Section 2 above, whichever is later.

- Remainder of page left intentionally blank -

IN TESTIMONY WHEREOF, the parties hereto have entered into this Agreement as of the day first shown above.

VADNAIS LAKE AREA WATER MANAGEMENT ORGANIZATION

Stephanie McNamara, Administrator

Dan Jones, VLAWMO Board Chair

Date: _____

Date: _____

BOARD OF WATER COMMISSIONERS OF THE CITY OF SAINT PAUL

Stephen P. Schneider, General Manager
Saint Paul Regional Water Services

Matt Anfang, President

Date: _____

Date: _____

Mollie Gagnelius, Secretary

Date: _____

Approved as to Form:

Assistant City Attorney

Todd Hurley, Director
Office of Financial Services

Date: _____

Date: _____



800 County Road E East, Vadnais Heights, MN 55127
www.vlawmo.org
office@vlawmo.org
(651) 204-6070

Date: August 18, 2017

To: the Board of Directors

From: Stephanie McNamara, Administrator

Re: VI.B. 2018 Storm Sewer Utility (SSU) Rates

The annual SSU rates are based on the budget approved by the Board at its last meeting for the following year. The Storm Sewer Utility is based on the amount of impervious surface generally associated with different land use types and provides the major financial support for watershed activities.

As discussed at the July Board meeting when the 2018 Budget was passed, the SSU rates will go up. And increase of 14.98% is less than the 15.49% total budget increase due to a large division in North Oaks. This year we anticipate the SSU will provide a sustaining level of income for the anticipated projects and programs identified in the new Water Plan. In other words, we are not drawing down our reserves to cover operating expenses. Grants have helped defray some of the costs and allowed VLAWMO to do more than is reflected in annual budget. But they are an unreliable source of income.

The proposed 2018 SSU annual rate is \$42.63/unit or \$61.44/acre. This is an increase of 14.98% from last year. Single family residential units will increase by \$5.79 /year or about \$0.48 / month. On nonresidential property the rate increased \$8.04 / acre or \$0.67 /month. The additional parcels from the boundary change helped absorb some of the increase.

Again, our budget is no longer being subsidized by drawing down reserves. The SSU is at a sustainable level. This budget begins to further address priorities in the 2017-26 Water Plan and the watershed ditch authority responsibilities. The budgets anticipated in 2017-2026 Water Plan anticipate a fairly modest annual operating increase. More substantial increases are seen in the capital part of the budget. This rate includes a 0.9% buffer to account for subsequent parcel changes, manual overrides and delinquent payments.

Recommendation: Approval of Resolution 02-2017 setting the Storm Sewer Utility Rates for 2018.



RESOLUTION 02-2017

Of the Vadnais Lake Area Water Management Organization (VLAWMO)

August 23, 2017

The Board of Directors of the Vadnais Lake Area Water Management Organization met in a regular meeting at the Vadnais Heights City Hall on Wednesday, the 23th day of August, 2017 at 7:00 o'clock p.m.

The following members were present:

The following members were absent:

Resolution 02-2017 was moved by Director _____ and seconded by Director _____:

RESOLUTION NO. 02-2017

A RESOLUTION APPROVING THE STORMSEWER UTILITY RATES FOR 2016.

WHEREAS, the 2018 Budget of the Vadnais Lake Area Water Management Organization (VLAWMO) has been approved by the VLAWMO Board of Directors and

WHEREAS, Storm Sewer Utility (SSU) Rule of the Vadnais Lake Area Water Management Organization, has been applied to the properties within the boundary,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF THE VADNAIS LAKE AREA WATER MANAGEMENT ORGANIZATION, The SSU Rates for 2018 will be as follows:

Classification	Total Amount	R.E.F.	Rate
Residential 1- 3 units	\$436,350.36	1.00	\$42.63 / Unit
Residential 4 or more	\$28,218.41	2.72	\$61.44 / Acre
Commercial	\$137,795.53	4.23	\$61.44 / Acre
Industrial	\$71,073.54	3.30	\$61.44 / Acre
Institutional	\$61,462.22	3.30	\$61.44 / Acre
Golf courses	\$10,105.91	0.74	\$61.44 / Acre
Agricultural	\$7,303.07	0.25	\$61.44 / Acre
Vacant/Road/RR/Water	\$0	Exempt	\$0.00

The resolution was declared passed and adopted.

Daniel Jones, Chair

Date

Attest:

Stephanie McNamara, Administrator

Date

August 23, 2017

To: The VLAWMO Board of Directors
From: Brian Corcoran
Re: VI.A. Lambert Creek – Maintenance

VI.C. Lambert Creek – Maintenance

Moving forward on the Lambert Creek drainage maintenance and VLAWMO's responsibility as ditch authority, staff contacted the DNR for their requirements when doing maintenance within public waters. Below is the DNR process and alternatives that could help improve flow through the system

When a ditch authority undertakes a public drainage ditch repair or project in or near public waters, DNR has a statutory obligation under MN Statute Chapters 103G and/or 103E to exercise oversight over the project. This is because public ditch repairs and projects have the potential to affect public waters because excavation is involved

To meet this definition (103E.701), the ditch authority would need to either have original design plans/as-builts for the public ditch or do soil borings and other analysis to determine the original dimensions of the ditch prior to excavation. The 1987 survey elevations would not work. The ditch repair has to be maintenance of an existing channel to original dimensions, not an improvement, so the ditch authority has to have documentation of the original channel dimensions. Also, prior to a ditch repair project, DNR would need to survey the OHW and the outlet elevation of the public water (there hasn't been an OHW survey done yet for this PW-wetland).

There are alternatives that the DNR provided that could help improve flow through the public water wetland and that would avoid the need to meet ditch law requirements:

1. Apply for a DNR aquatic plant management permit (<http://www.dnr.state.mn.us/apm/index.html>). 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.

A permit would also be required from the Army CORPS for any work done in this system, WCA rules would not apply for work below the OHW of a public water in the system.



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To: the Board of Directors
From: Stephanie McNamara
Re: VI.D. Consideration of Ditch Authority.

Clarifying authority and responsibility as a ditch authority continues to be an ongoing discussion. We have some legal guidance from Troy Gilchrist, the VLAWMO attorney which provides further background and legal argument for how we should manage the ditch and its branches. The email from Troy is attached. The following is my take- away.

- 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.
- 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). VLAWMO could always be sued of course. The watershed could be found liable if it “fails to maintain the ditches and that failure allegedly results in damage to properties.”
- 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.
- 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.
- How we manage the ditch should be defined in our water plan. The VLAWMO Plan can be found at the following link: [VLAWMO Water Plan](#). There are references under Priority Issue 6 (pg. 31) Localized flooding; Under Subwatershed Activities for Lambert Creek (pf.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.

These are the questions posed to our attorney and the answers provided. The email includes more historical precedent for some of the opinions. The assessment question was postponed for the time being but can certainly be a follow-up review.

1. As ditch authority, what is VLAWMO required to do?

With the authority provided under Section VI, Subd. 5 to repair, improve, and maintain the drainage system under the MWO’s in Chapter 103B comes a general duty to keep the system reasonably maintained as there



are no specific duties related to drainage system in the WMO's authority under Chapter 103B. This is similar to the general duty a city has to keep its streets open and maintained (i.e., there is not a list of statutory tasks a city must perform on its streets (there are strings attached to state funding, but that is a different matter)).

What work is to be done on the ditch system to satisfy this general duty is up to the commission to decide. If the condition of one of the ditches is such that it is creating problems for the adjacent property owners, the commission would reasonably want to take action to correct the situation. Though any such work must be carried out in conformance with the watershed plan.

Given the fact that the commission is to manage the drainage system that was transferred to it in accordance with its authority under Chapter 103B and must conform to its watershed plan, I recommend the commission provide for any work it proposes to perform on the ditches as a capital improvement project under its plan. I do not get involved with developing the details of the capital improvement program, but if there are on-going maintenance duties the commission wants to provide for I do not see why that could not be identified and incorporated into the plan.

2. Could VLAWMO be petitioned or sued to do work on the ditch by individuals or perhaps municipalities?

Because the commission is managing the ditches under Chapter 103B, not Chapter 103E, in my view the petition procedure set out in Chapter 103E does not apply. The answer to second part of your question, can we be sued, is always yes. We cannot control what people may choose to sue over, but I am not concerned that the commission would be successfully challenged for not carrying out some specific duty with respect to the ditches under Chapter 103E since it is not operating under that authority. If, however, the commission fails to maintain the ditches and that failure allegedly results in damage to properties, then there could be liability. This goes back to the general duty I mentioned – a failure to maintain that results in damage to others can constitute a breach of that duty for which liability can result.

3. What process should we be following if we identify a need along the ditch to assess the options and then implement a possible best management process?

My thought is that commission would have its engineer review the ditches, determine if any work/project is needed to keep them properly maintained, and then schedule it as a capital project under the plan. In other words, the commission would take this on as its own project that it would fund, contract for, and perform/construct. This is, of course, different from its typical role of assisting in funding projects constructed by others. I suggest the commission program in the review by the engineer on some regular basis as recommended by the engineer and seek input from the engineer as to whether there are other issues the commission should be considering as part of its general duty to keep the ditches maintained. I



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suspect finding the funds to pay for the inspections and any needed work will be of particular importance to the commission. I didn't research that issue, but my initial impression is that since this work is part of the authority given to the commission, there should be no (legal) issue with it using its funds for that purpose.



From: Gilchrist, Troy J.
Sent: Thursday, August 10, 2017 7:57 PM
To: Stephanie McNamara
Subject: RE: VLAWMO ditch authority (VA245-1)

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Stephanie,

As we have previously discussed, the county acted by resolution in 1986 to transfer the ditches to the WMO under the authority in Minn. Stat. § 112.65, which is the statute that provided for such transfers at that time. The authority to transfer a drainage ditch still exists under current law (Minn. Stat. § 103E.812), but with different procedures than the previous statute. As you recall, that was the discussion I had with BWSR, which agreed that because the transfer occurred prior to the adoption of Minn. Stat. § 103E.812, the fact the transfer didn't occur in accordance with the later-adopted procedure had no effect on the validity of the transfer. In short, the 1986 transfer is presumed valid and so the WMO is the authority over those ditches.

In looking back at the discussion we had about this in April 2016, my initial impression was that the WMO was to operate the ditches as a ditch authority under Chapter 103E because the original transfer statute referred to the transferred ditches being managed in accordance with Chapter 106A (which has since become Chapter 103E). However, Minn. Stat. § 103E.812, subd. 8 provides as follows:

Subd. 8. Effect of transfer. (a) Except as provided in this section, after transfer of a drainage system, or any part thereof, to a water management authority, the drainage system ceases to be subject to regulation under this chapter except that if only a portion of a drainage system is transferred, the water management authority may be assessed for improvements under section [103E.215](#) or repairs under sections [103E.701](#) to [103E.711](#) in the manner provided under sections [103E.315](#) and [103E.601](#) to [103E.615](#). The water management authority may manage water within its jurisdictional boundaries according to whatever law controls the function of the water management authority. The transferred drainage system shall become a work and a responsibility of the transferee water management authority. All responsibility of the drainage authority for the transferred drainage system ends.

There is also language in Minn. Stat. § 103B.227, subd. 7 indicating that "Watershed management organizations may accept transfer of drainage systems under sections 103B.205 to 103B.255."

The current legislative direction is that when a drainage system is transferred to a WMO, the WMO is to manage it in accordance with the law that applies to the WMO, which is Minn. Stat. § 103B.201-.253. So, the question becomes which legislative direction is the WMO to follow: (1) the direction of the earlier statute that referred to what is now Chapter 103E; or (2) the current language related to transfers under Chapter 103E, which directs that the WMO is to manage the ditches under its own statutes (rather than 103E)?

I mentioned as part of our earlier discussions that there is an argument the WMO can exercise powers under 103E by relying on the previous transfer statute. However, it appears we resolved that question in favor of following the current legislative direction of the WMO relying on its own authority under Chapter 103B to manage the ditches. As such, the language in the updated JPA continues to refer, with respect to transferred ditches, to carrying out the repair, improvement, and maintenance of the ditches under Chapter 103B. I realize that is a lot of background, but it is important to recognize the process that resulted in the WMO looking to its authority under Chapter 103B to manage

these ditches rather than trying to argue it is a ditch authority under 103E. The question then becomes what are the duties and authority of the WMO under Chapter 103B with respect to the ditches.

Included in the list of potential powers in Minn. Stat. § 103B.211, subd. 1 communities can provide to the WMO through the JPA is the following:

(4) the authority of a watershed district under section 103D.625, to accept the transfer of drainage systems in the watershed, to repair, improve, and maintain the transferred drainage systems, and to construct all new drainage systems and improvements of existing drainage systems in the watershed, provided that: (i) projects may be carried out under the powers granted in sections 103B.205 to 103B.255 or chapter 103D or 103E; and (ii) proceedings of the board with respect to the systems must be in conformance with the watershed plan adopted under section 103B.231;

Reading this language together with the language from Minn. Stat. § 103E.812, subd. 8, the law that controls how the WMO is to manage the ditches is that the communities are to decide, as part of the JPA, which authority (103B, 103D, or 103E) the WMO is to exercise in that regarding.

As you pointed out, the JPA speaks to the transfer of drainage systems in Section VI, Subd. 5. The following shows the edits that were made to the subdivision as part of update:

Subdivision 5. Transfer of Drainage System. VLAWMO shall have the authority of a watershed district under ~~section Minn. Stat. Minnesota Statutes, Chapter 103B, Chapter 103E, and other applicable law~~ to accept the transfer of drainage systems in the watershed, to repair, improve, and maintain the transferred drainage systems, and to construct all new drainage systems and improvements of existing drainage systems in the watershed, ~~provided that. All such activities and projects may shall~~ be carried out ~~under the powers granted in Minn. Stat. Chapter 103B and that proceedings of the Board with respect to the systems~~ in accordance with the powers and procedures set forth in Minnesota Statutes, Chapters 103B and other applicable law, and must be in conformance with the Watershed Management Plan adopted pursuant to ~~Minn. Stat. Minnesota Statutes, Chapters 103A through 103H.~~

Based on the current language, as well as the previous language, it is clear the communities elected to have the WMO manage the ditches transferred to it under Chapter 103B. While the current JPA language potentially opened the door to exercise authority outside of Chapter 103B by adding "and other applicable law," that addition was more to recognize the complicated and interconnected nature of the various statutory authorities in this area rather than to suggest a change in the fundamental authority to be exercised to manage the ditches. As such, I recommend the commission remain focused on its authority under Chapter 103B when it comes to managing the transferred ditches.

Now, to your questions:

1. As ditch authority, what is VLAWMO required to do?

With the authority provided under Section VI, Subd. 5 to repair, improve, and maintain the drainage system under the MWO's in Chapter 103B comes a general duty to keep the system reasonably maintained as there are no specific duties related to drainage system in the WMO's authority under Chapter 103B. This is similar to the general duty a city has to keep its streets open and maintained (i.e., there is not a list of statutory tasks a city must perform on its streets (there are strings attached to state funding, but that is a different matter)).

What work is to be done on the ditch system to satisfy this general duty is up to the commission to decide. If the condition of one of the ditches is such that it is creating problems for the adjacent property owners, the commission would reasonably want to take action to correct the situation. Though any such work must be carried out in conformance with the watershed plan.

Given the fact that the commission is to manage the drainage system that was transferred to it in accordance with its authority under Chapter 103B and must conform to its watershed plan, I recommend the commission provide for any work it proposes to perform on the ditches as a capital improvement project under its plan. I do not get involved with developing the details of the capital improvement program, but if there are on-going maintenance duties the commission wants to provide for I do not see why that could not be identified and incorporated into the plan.

2. Could VLAWMO be petitioned or sued to do work on the ditch by individuals or perhaps municipalities?

Because the commission is managing the ditches under Chapter 103B, not Chapter 103E, in my view the petition procedure set out in Chapter 103E does not apply. The answer to second part of your question, can we be sued, is always yes. We cannot control what people may choose to sue over, but I am not concerned that the commission would be successfully challenged for not carrying out some specific duty with respect to the ditches under Chapter 103E since it is not operating under that authority. If, however, the commission fails to maintain the ditches and that failure allegedly results in damage to properties, then there could be liability. This goes back to the general duty I mentioned – a failure to maintain that results in damage to others can constitute a breach of that duty for which liability can result.

3. What process should we be following if we identify a need along the ditch to assess the options and then implement a possible best management process?

My thought is that commission would have its engineer review the ditches, determine if any work/project is needed to keep them properly maintained, and then schedule it as a capital project under the plan. In other words, the commission would take this on as its own project that it would fund, contract for, and perform/construct. This is, of course, different from its typical role of assisting in funding projects constructed by others. I suggest the commission program in the review by the engineer on some regular basis as recommended by the engineer and seek input from the engineer as to whether there are other issues the commission should be considering as part of its general duty to keep the ditches maintained. I suspect finding the funds to pay for the inspections and any needed work will be of particular importance to the commission. I didn't research that issue, but my initial impression is that since this work is part of the authority given to the commission, there should be no (legal) issue with it using its funds for that purpose.

Feel free to let me know if there are any other questions.

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From: Stephanie McNamara [mailto:stephanie.o.mcnamara@vlawmo.org]
Sent: Tuesday, July 25, 2017 5:21 PM
To: Gilchrist, Troy J.
Subject: VLAWMO ditch authority

Hello Troy,

I hope this finds you well. We are well into the summer season around here which means we are busy with projects, monitoring and a variety of programs. We hoping you can help us get a better handle on one area of responsibility. As you know, VLAWMO became the ditch authority for Ramsey County Ditches 13, and 14 and the branches of 14 in 1987 when it was turned over from the County. I have attached a map of Lambert creek (County ditch 14 and its ditches). Ditch 13 is a storm sewer pipe at feeds into Lambert Creek in White Bear.

The Board and staff are trying to get a better handle on what our role is under this authority and what tools we might have to get done whatever might be needed. Basically these are the questions, so far anyway that we hope you can help us with:

- As ditch authority, what is VLAWMO required to do? It has been about 30 years since the ditch was cleaned and there are some concerned residents that this impacting the flow. That said, VLAWMO and partners have done a variety of improvements to the ditch, restoring wetland area, replacing flumes, stabilizing eroding creek banks and years of monitoring.
- Could VLAWMO be petitioned or sued to do work on the ditch by individuals or perhaps municipalities?
- What process should we be following if we identify a need along the ditch to assess the options and then implement a possible best management process?

You know the applicable parts of state law better than I, but I have attached our Joint Powers Agreement that you helped with for your quick reference. It would seem some of the applicable language falls under Section VI, Responsibilities of the Board of Directors. Please give me a call with any questions. We are just getting going on this and hope to clarify what VLAWMO's role in ditch management, with a follow-up exploration of CIP funding options.

From the VLAWMO JPA, Section VI:

Subdivision 5. Transfer of Drainage System. VLAWMO shall have the authority of a watershed district under Minnesota Statutes, Chapter 103B, Chapter 103E, and other applicable law to accept the transfer of drainage systems in the watershed, to repair, improve, and maintain the transferred drainage systems, and to construct all new drainage systems and improvements of existing drainage systems in the watershed. All such activities and projects shall be carried out in accordance with the powers and procedures set forth in Minnesota Statutes, Chapters 103B and other applicable law, and must be in conformance with the Watershed Management Plan adopted pursuant to Minnesota Statutes, Chapters 103A through 103H.

Subdivision 6. Capital Improvement. Each Member agrees to contribute its proportionate share of all approved capital improvement expenditures, which includes engineering, planning, legal and administrative costs, based on the benefit to be received by each Member or other entity from the improvement or management project. The Board shall submit, in writing, a statement to each Member or other entity, setting forth in detail the expenses incurred by VLAWMO for each project.

Capital improvement projects may be initiated either by: (1) recommendation of the VLAWMO Board to the governmental unit(s) affected; or (2) petition to the Board by the affected governmental unit. In either case, and after study and approval by two-thirds (2/3) of the Directors, the Board shall provide the affected governmental units with estimated costs and a description of the benefits to be realized by those affected and the costs to be borne based on benefit.

Subdivision 7. Water Conveyances. The Board may order any local governmental unit to construct, clean, repair, alter, abandon, consolidate, reclaim or change the course of terminus of any ditch, drain, storm sewer, water course, natural or artificial, that affects the Vadnais Lakes Area Watershed in accordance with its adopted plans.

Subdivision 8. Watershed Operations. The Board may order any local government unit to acquire, operate, construct or maintain dams, dikes, reservoirs and appurtenant works in accordance with adopted plans.

I am hoping to have more information for the Board at their next meeting August 23rd. Perhaps there is even a time you could come to a Board meeting? Thank you and I look forward to hearing from you.

Stephanie McNamara

Stephanie McNamara, Administrator
Vadnais Lake Area Water Management Organization (VLAWMO)
800 County Road E East, Vadnais Heights, MN 55127
www.vlawmo.org direct: 651-204-6073; fax: 651-204-6173

August 18, 2017

To: The VLAWMO Board of Directors
From: Nick Voss, Education and Outreach Coordinator
Re: VII.A. Education and Outreach

1. Community Outreach Update

- We currently have 6 drains adopted in the adopt-a-drain program.
- During our bothing season, we gave away 5 rain barrels and grew our email list by 75 new email subscriptions to our seasonal newsletter.
- A partnership with an Eagle Scout (Erik Barsness) provided valuable service hours at the VLAWMO booth, 16 labeled stormdrains in Vadnais Heights, and 35 lbs. of debris (sand, leaves, grass) removed from these stormdrains. Such information is gathered with each stormdrain labeling project and will compile a total at the end of each year.
- Water Bugs at Sucker Channel has had 6 events with 77 participants. To accompany workshops, informational VLAWMO brochures are provided to students to take home to parents/guardians.
- VLAWMO staff is holding a 'tour the watershed' presentation on August 30th at 6-7:30 pm at the VH Fire Department. We'll cover watershed history, lakes and Lambert Creek, future projects and goals, and take Q&A. The presentation will be recorded for local cable channel 16.
- VLAWMO is partnering with Rice Creek, WBL, Mahtomedi, and Conservation Minnesota to host a community water meeting in conjunction with the State-wide "25 by 25" initiative. The goal, from Governor Dayton, is to improve MN water quality 25% by 2025. The goal of the meeting is to collect comment how to improve water quality at the local level. VLAWMO will be present with a table, will provide a brief presentation introducing what watersheds do for water resources, and will be available for questions. We see this as an opportunity to keep VLAWMO connected with neighboring organizations and be present where relevant. The meeting will take place on September 21 at 6:30-8:30pm, at WBL City Hall.

2. Comprehensive Plan assistance

VLAWMO is in contact with each City and Township regarding the updating of their comprehensive plans. With all cities yet to complete a complete draft, VLAWMO has provided an initial summary of our watershed comprehensive plan to maintain familiarity throughout the plan process.

We are now forming detailed assistance to help specify city-specific standards, nutrient loading, and goals, based on the 2013 TMDL, VLAWMO water policy, and VLAWMO comprehensive plan. Initial results will be ready this fall, and will be ongoing with the planning process as needed.

White Bear Lake Area

COMMUNITY WATER MEETING

A statewide initiative
from Governor Dayton
to improve Minnesota's
water quality 25%
by 2025.

What for?

This meeting is an opportunity to share ideas on how we can improve water health at the local level. The ideas and comments generated will be shared with Governor Dayton to contribute to the statewide initiative to improve Minnesota's water quality 25% by 2025. Join us in shaping the future of Minnesota's clean water legacy!

25BY25

MINI-PRESENTATIONS

Learn how to support local watersheds working for clean water near you.

**Rice Creek
Watershed District: RCWD**

www.RICECREEK.org



**Vadnais Lake Area Water
Management Organization: VLAWMO**

www.VLAWMO.org



COMMENTS & DISCUSSION

Browse various topics concerning water quality while contributing your thoughts, experience, and values. Comments will be directly applied to future actions towards the 25% goal.

Thursday, September 21

6:30-8:30 pm

White Bear Lake City Hall
4701 Highway 61

Free event



**CONSERVATION
MINNESOTA**
Protect the Minnesota you love.®

RSVP:

julie@conservationminnesota.org | (612) 767-1569

TEC Report to the Board
August 2017

Programs & Projects	Effort Level	Completion Date	Comments
	LOW		
	MED		
	HIGH		
Projects			
Priority Lakes	HIGH	2017	Alum dosing assessment for Goose goes to the Board in August. Vegetation surveys are underway on Wilkinson. Fish surveys will be done in August on Goose & Wilkinson.
Sucker Lake Channel	MED	2017	The construction contract is out for bid. The native landscaping bidding will go this fall. A fall installation is planned.
Lambert Creek - Koehler	LOW	2017	Project complete, grant finalized
Birch Lake	HIGH	2017	The report from Barr Eng. for a project at 4th & Otter is complete and a grant application will be submitted Aug. 9th.
Whitaker Wetlands	MED	2017	Belair Construction is prepping for October installation. Several payments have been reimbursed under the grant.
Programs			
Outreach	HIGH	ongoing	A full summer of community events has seen VLAWMO volunteers, staff and Drippy the waterdrop mascot out meeting the public.
Education	MED	ongoing	Attended 5 community events and grew our email list by 75 new newsletter subscriptions. Gave away 5 rainbarrels. Held 6 waterbugs workshops with 77 participants. Currently have 6 drains adopted in the adopt-a-drain pilot
Website	MED	ongoing	Blog and news updates ongoing. A "how did you hear about us" form on the home page will allow for ongoing feedback from visitors.
WAV	LOW	ongoing	WAV members are advising and assisting the Adopt-a-Drain pilot program. Volunteer groups are in planning phases to participate in stormdrain stenciling; Alina Nurses and local scout troops.
Cost Share	LOW	ongoing	LL1 funds are depleted for 2017; LL2 has \$20,000 left currently
GIS	MED	ongoing	SSU databases, ArcGIS online, maps for ditch maintenance
Monitoring	MED	ongoing	2017 full season of monitoring underway.
Admin & Operation			
SLMPs	MED	2017	Charley Lake SLMP is currently being worked on; studies being completed.
Audit & annual reporting	LOW	May 2017	Annual audit and report is complete and has been distributed. They are available on the website and in the office.
Administration	HIGH	2017	The draft SSU rates for next year will be set at the August Board mtg. Completing the monthly bookkeeping internally is going well so far.
WCA	MED	ongoing	A wetland boundary update in WBL (Larey) was approved. The incidental wetland request has been withdrawn.

TEC Report to the Board
August 2017

FINANCIAL SUMMARY as of 8/1/2017			
4M Account (.73)		4M Plus (.78)	Total
\$220,652		\$179,990	\$400,642

CD's	4M Term Series		
	Amount	Maturity	Rate
Term series	NA		

Budget Summary	Actual Expense YTD	2017 Budget amended	Remaining in Budget	% YTD
Operations	\$327,154	\$554,660	\$227,506	59%
CIP	\$316,603	\$746,575	\$429,972	42%
Total	\$643,757	\$1,301,235	\$657,478	49%



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To: the Board of Directors

From: Stephanie McNamara

Re: VII.C. Financial Report

August finds our expenses and income right about where it was anticipated. 59% of the operations budget and 42% of the Capital budget have been expended as reflected in the Treasurers Report summary. Expenses are coming in under the Whitaker treatment wetland project. And the first three reimbursement payments have been received as well.



8/1/2017		Actual 8/1/17	Actual to Date	2017 Budget	2016 carry over/Grants	Remaining in Budget	2017 available (B+C/O)	Act vs. Budget
BUDGET #	INCOME 5.1							
5.11	Storm Water Utility	\$0	\$359,107	\$564,360	\$0	\$205,253	\$564,360	64%
5.12	Service Fees	\$0	\$112	\$500	\$0	\$388	\$500	22%
5.13	Interest	\$275	\$793	\$200	\$0	(\$593)	\$200	396%
5.14	Misc. income - WCA admin grant	\$60	\$4,420	\$5,000	\$0	\$581	\$5,000	88%
5.15	Other Income Grants	\$11,081	\$89,197	\$0	\$0	(\$89,197)	\$0	
5.16	Transfer from reserves		\$90,000	\$75,000	\$0	(\$15,000)	\$75,000	120%
	TOTAL	\$11,416	\$543,628	\$645,060	\$0	\$101,432	\$645,060	84%

EXPENSES

3.1	Operations & Administration							
3.110	Office - rent, copies, post tel supplies	\$3,534	\$14,639	\$22,660	\$0	\$8,021	\$22,660	65%
3.120	Information Systems	\$710	\$9,024	\$19,500	\$2,500	\$12,976	\$22,000	41%
3.130	Insurance	\$3,121	\$4,655	\$5,200	\$500	\$1,045	\$5,700	82%
3.141	Consulting - Audit	\$0	\$6,170	\$6,800	\$0	\$630	\$6,800	91%
3.142	Consulting - Bookkeeping	\$0	\$1,420	\$1,500	\$0	\$80	\$1,500	95%
3.143	Consulting - Legal	\$438	\$2,369	\$3,000	\$5,000	\$5,631	\$8,000	30%
3.150	Storm Sewer Utility	\$550	\$6,509	\$16,000	\$0	\$9,491	\$16,000	41%
3.160	Training (staff/board)	0	\$565	\$4,000	\$0	\$3,435	\$4,000	14%
3.170	Misc. & mileage	\$202	\$2,143	\$7,000	\$4,000	\$8,857	\$11,000	19%
3.191	Administration - staff	\$23,422	\$207,458	\$303,000	\$10,000	\$105,542	\$313,000	66%
3.192	Employer Liability	\$6,255	\$55,282	\$70,000	\$0	\$14,718	\$70,000	79%
3.2	Monitoring and Studies							
3.210	Lake and Creek lab analysis	\$608	\$9,152	\$18,000	\$2,000	\$10,848	\$20,000	46%
3.220	Equipment	\$29	\$443	\$2,500	\$2,500	\$4,557	\$5,000	9%
3.3	Education and Outreach							
3.310	Public Education	\$37	\$5,465	\$7,000	\$1,500	\$3,035	\$8,500	64%
3.320	Marketing	\$102	\$1,160	\$7,000	\$1,500	\$7,340	\$8,500	14%
3.330	Community Blue Ed Grant	\$0	\$700	\$20,000	\$12,000	\$31,300	\$32,000	2%
<i>Total Core functions: Ops, Monitoring, Education</i>		\$39,007	\$327,154	\$513,160	\$41,500	\$227,506	\$554,660	59%

Capital Improvement Projects and Programs

3.4	Subwatershed Activity							
3.410	Gem Lake	\$0	\$0	\$0	\$0	\$0	\$0	
3.420	Lambert Creek	\$59,789	\$241,398	\$401,000	\$28,675	\$188,277	\$429,675	56%
3.425	Goose Lake	\$980	\$8,123	\$14,900	\$55,000	\$61,777	\$69,900	12%
3.430	Birch Lake	\$7,286	\$11,889	\$5,700	\$15,000	\$8,811	\$20,700	57%
3.440	Gilf Black Tam Wilk Amelia	\$980	\$16,878	\$17,600	\$0	\$722	\$17,600	96%
3.450	Pleasant Charley Deep	\$0	\$0	\$5,700	\$0	\$5,700	\$5,700	0%
3.460	Sucker Vadnais	\$0	\$0	\$0	\$65,000	\$65,000	\$65,000	0%
3.470	Facilities Maintenance	\$0	\$2,290	\$10,000	\$18,000	\$25,710	\$28,000	8%
3.48	Programs							
3.481	Landscape 1	\$2,748	\$7,694	\$24,000	\$4,000	\$20,306	\$28,000	27%
3.482	Landscape 2	\$10,000	\$10,000	\$30,000		\$20,000	\$30,000	33%
3.483	Project Research & feasibility	\$0	\$18,331	\$17,000	\$20,000	\$18,669	\$37,000	50%
3.5	Regulatory							
3.510	Engineer Plan review			\$5,000	\$10,000	\$15,000	\$15,000	0%
<i>Total CIP & Program</i>		\$81,783	\$316,603	\$530,900	\$215,675	\$429,972	\$746,575	42%
Total of Core Operations & CIP		\$120,790	\$643,757	\$1,044,060	\$257,175	\$657,478	\$1,301,235	49%

Fund Balance	7/15/2017	8/11/2017
4M Account	\$333,451	\$220,652
4M Plus Savings	\$49,867	\$179,990
Total	\$383,318	\$400,641

Restricted funds	8/1/2017
Mitigation Savings	\$29,634
Term Series (NA)	

Vadnais Lake Area Water Management Organization

1:32 PM

Check Detail

08/03/2017

July 17 through August 11, 2017

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Check EFT	07/19/2017	Reliance Standard		Checking - 1987		-160.95	
				Insurance Benefit		-160.95	160.95
TOTAL						-160.95	160.95
Check EFT	07/22/2017	SelectAccount		Checking - 1987		-5.00	
				Insurance Benefit		-5.00	5.00
TOTAL						-5.00	5.00
Check 4368	08/11/2017	Nicholas Voss		Checking - 1987		-81.64	
				3.170 · Misc. & mileage		-68.48	68.48
				3.320 · Marketing		-13.16	13.16
TOTAL						-81.64	81.64
Check 4369	08/11/2017	Brian Corcoran		Checking - 1987		-109.01	
				3.170 · Misc. & mileage		-94.16	94.16
				3.220 · Equipment		-14.85	14.85
TOTAL						-109.01	109.01
Check 4370	08/11/2017	Kristine Jenson		Checking - 1987		-19.63	
				3.170 · Misc. & mileage		-19.63	19.63
TOTAL						-19.63	19.63
Check 4371	08/11/2017	City of Vadnais Heights		Checking - 1987		-3,533.85	
				Rent		-2,900.00	2,900.00
				Phone/Internet/Machine Overhead		-350.00	350.00
				Phone/Internet/Machine Overhead		-120.00	120.00
				Copies		-92.05	92.05
				Copies		-11.29	11.29
				Postage		-60.51	60.51
TOTAL						-3,533.85	3,533.85
Check 4372	08/11/2017	Ehlers & Associates, Inc.		Checking - 1987		-550.00	
				3.150 · Storm Sewer Utility		-550.00	550.00
TOTAL						-550.00	550.00
Check 4373	08/11/2017	ESRI		Checking - 1987		-709.98	

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
TOTAL							-33.80	33.80
	Check	4382	08/11/2017	Kennedy & Graven, Chartered		Checking - 1987		-437.80
					3.143 · Legal		-437.80	437.80
TOTAL							-437.80	437.80
	Check	4383	08/11/2017	Burns & McDonnell		Checking - 1987		-22,859.46
					Whitaker Wetlands		-22,859.46	22,859.46
TOTAL							-22,859.46	22,859.46
	Check	4384	08/11/2017	Burns & McDonnell		Checking - 1987		-36,869.33
					Whitaker Wetlands		-36,869.33	36,869.33
TOTAL							-36,869.33	36,869.33
	Check	4385	08/11/2017	Bullis Insurance Agency LLC		Checking - 1987		-3,121.00
					3.130 · Insurance		-3,121.00	3,121.00
TOTAL							-3,121.00	3,121.00

Vadnais Lake Area Water Management Organization
Profit & Loss Detail
 July 17 through August 11, 2017

4:49 PM

08/03/2017

Cash Basis

Type	Date	Num	Name	Memo	Original Amount	Paid Amount
Invoice	07/20/2017	169	State of Minnesota	PERA AID	59.50	59.50
Income						
Misc.						
Total Misc.						
5.1 - Income						
5.13 - Interest						
Total 5.13 - Interest						
5.15 - Other Income Grants						
Deposit	07/31/2017		U.S. Bank	Deposit	196.47	196.47
Deposit	07/31/2017		U.S. Bank	Deposit	78.97	78.97
Total 5.15 - Other Income Grants						
Invoice	07/17/2017	168	State of Minnesota	Grant payments Whitaker Wetlands	11,080.61	11,080.61
Total 5.15 - Other Income Grants						
Total 5.1 - Income						
Total Income						
Gross Profit						
Expense						
3.1 - Administrative/Operations						
3.110 - Office						
Copies						
Check	08/11/2017	4371	City of Vadnais Heights	color copies	92.05	92.05
Check	08/11/2017	4371	City of Vadnais Heights	B/w copies	11.29	11.29
Total Copies						
Phone/Internet/Machine Overhead						
Check	08/11/2017	4371	City of Vadnais Heights	phone/computer connection	350.00	350.00
Check	08/11/2017	4371	City of Vadnais Heights	copy/postage/fax fees	120.00	120.00
Total Phone/Internet/Machine Overhead						
Postage						
Check	08/11/2017	4371	City of Vadnais Heights	postage	60.51	60.51
Total Postage						
Rent						
Check	08/11/2017	4371	City of Vadnais Heights	rent	2,900.00	2,900.00
Total Rent						
Total 3.110 - Office						
3.120 - Information Systems						
WEB						
Check	08/11/2017	4373	ESRI	Invoice 93315069	709.98	709.98
Total WEB						
Total 3.120 - Information Systems						
3.130 - Insurance						
Total 3.130 - Insurance						

Type	Date	Num	Name	Memo	Original Amount	Paid Amount
3.3 · Education and Outreach						
3.310 · Public Education						
					36.97	36.97
Credit Card	07/19/2017		Amazon.com	Peiri Dish		36.97
Total 3.310 · Public Education						
					88.47	88.47
Credit Card	07/26/2017		Blue Sun Soda	Sodas for Marketfest		88.47
3.320 · Marketing						
					13.16	13.16
Check	08/11/2017	4368	Nicholas Voss	Marketfest supplies		13.16
					101.63	101.63
Total 3.320 · Marketing						
					138.60	138.60
Total 3.3 · Education and Outreach						
3.4 · Capital Imp. Projects/Programs						
3.420 · Lambert Creek Restoration						
Lambert - Kohler flume						
					60.26	60.26
Credit Card	07/24/2017		Hedberg	Shrubs for Kohler Flume area		60.26
Total Lambert - Kohler flume						
					22,859.46	22,859.46
Check	08/11/2017	4383	Burns & McDonnell	Prelim & Final Design and Permittin		22,859.46
Whitaker Wetlands						
					36,869.33	36,869.33
Check	08/11/2017	4384	Burns & McDonnell	Construction Mgmt & Construction o		36,869.33
Total Whitaker Wetlands						
					59,728.79	59,728.79
Total 3.420 · Lambert Creek Restoration						
					979.80	979.80
Check	08/11/2017	4374	Barr Engineering Co	23621238.00-7 goose/wilk		979.80
3.425 · Goose Lake						
					7,286.25	7,286.25
Check	08/11/2017	4374	Barr Engineering Co	23621249.00-6 & 23621249.00-5 bir		7,286.25
3.430 · Birch Lake						
					979.80	979.80
Check	08/11/2017	4374	Barr Engineering Co	23621238.00-7 goose/wilk		979.80
Total 3.430 · Birch Lake						
					69,034.90	69,034.90
3.440 · Giffilian Black Tamarack Wilkin						
Total 3.440 · Giffilian Black Tamarack Wilkin						
Total 3.4 · Capital Imp. Projects/Programs						
3.48 · Programs						
3.481 · Landscape 1 - cost-share						
					322.67	322.67
Check	08/11/2017	4377	Rika Pennington	Grant 2017-01		322.67
					2,000.00	2,000.00
Check	08/11/2017	4378	Denise Kukielka	Grant 2017-04		2,000.00
					425.00	425.00
Check	08/11/2017	4379	Patrice Kuppe	maintenance grant 2017-09M		425.00
Total 3.481 · Landscape 1 - cost-share						
					2,747.67	2,747.67
3.482 · Landscape 2						
					10,000.00	10,000.00
Check	08/11/2017	4380	The Pines of North Oaks	LL2 Grant L2-2017-01		10,000.00
Total 3.482 · Landscape 2						
					12,747.67	12,747.67
Total 3.48 · Programs						
					120,789.78	120,789.78
Total Expense						
					-109,374.23	-109,374.23
Net Ordinary Income						
					-109,374.23	-109,374.23
Net Income						



August 23, 2017

To: The VLAWMO Board of Directors
From: Staff
Re: VII.D. Project Updates

1. Sucker Channel Restoration Project

The first phase of this project was put out for bid. The contractor who was awarded the project is Our funds will go partly towards this first phase in terms of installation of the fishing nodes and preparation of the native buffer components. There will be a separate bid for the actual planting so that we can work with a contractor with experience in this sort of landscaping work. That separate bid will go out later in the fall with planting to occur in the spring.

2. Birch Lake Project

Kristine submitted an application for a Clean Water Fund Grant for this project. We will not hear any decisions until December. The City of WBL passed a resolution supporting this project and pledging \$15,000 towards the match requirements. The high end cost estimate is \$121,000. Kristine's request was for \$97,000 which would require a nearly \$30,000 match.

3. Whitaker Treatment Wetlands

Contractor is moving forward with coordinating construction. Construction to begin October 2, 2017, expected to last 4-6 weeks. Six reimbursement requests have been submitted for project and accepted.

August 23, 2017

To: The VLAWMO Board of Directors

From: Kristine Jenson

Re: VII.E. Planning – Charley Lake Sustainable Lake Management Plan (SLMP)

Staff have been working on the latest SLMP, focusing on Charley Lake. As discussed in the 10 Year Watershed Management Plan, VLAWMO is committed to producing these reports on an annual basis. A chart with the schedule for these reports is shown below:

Lake	Year Completed	Year Updated
Charley	2017	
Deep	2018	
Amelia	2019	
Pleasant	2020	
East Vadnais	2021	
Sucker	2022	
West Vadnais	2023	
Birch	2008	2016/2026
Tamarack	2009	2019
Gilfillan	2010	2020
Wilkinson	2011	2021
Goose	2013	2023
Gem	2015	2024
Black	2015	2025

As part of our SLMP preparation, we have been working with the Ramsey Conservation District to conduct bathymetry and vegetation surveys. The bathymetry gives us a picture of what the lake bottom looks like and the general make-up of the sediment (hard vs. soft soils). By understanding the shape and structure of the lake bottom, we get a better idea as to whether certain fish or other water creatures can thrive there as well as where we would likely find vegetation. The vegetation study gives us a picture of what plants live in the lake as well as along the shoreline. It helps us identify if there are any invasive plants and determine the spread of those plants.

The goal is to have the SLMP complete by the end of this year. Kristine has been working with Tyler on the production of maps as well as the writing of the report. Previous SLMPs are available for other lakes on our website. These reports are a useful tool in helping VLAWMO determine the current health of the lake as well as what projects we should be planning for in the future.