VLAWMO
Vadnais Lake Area
Water Management Organization
800 East County Road E, Vadnais Heights, 55127 651-204-6070

BOARD OF DIRECTORS MEETING AGENDA

7:00 PM June 28, 2017

Vadnais Heights City Hall, Council Chambers

800 County Road E, East, Vadnais Heights

I. **Call to Order**, Chair, Dan Jones with introductions

II. **Approval of Agenda**

III. **Approval of Minutes** from April 26, 2017

IV. **New Business**
- A. Consideration of authority and process to assess benefiting area for capital projects – legal opinion - Stephanie

V. **Old Business**
- A. Lambert Creek – Lambert Lake/Pennington – Kohler flume – Brian/Tyler
- B. Goose-Wilkinson study update & next steps – Kristine/Stephanie
  1. Alum treatment Grant application
  2. Spent lime pilot project
- C. 2018 Budget decision Res. 01-2017 – Stephanie
- D. Whitaker Treatment Wetlands – construction contract – Brian

VI. **Operations and Administration - Reports**
- A. TEC Report
- B. Finance
- C. Project Updates
  1. Sucker channel restoration project – Kristine
  2. Birch Lake project
- D. Education & Outreach
  1. Community outreach update
  2. Storm pond/wetland buffers
- E. Landscape Level 2 Grant Application Considerations
  1. L2-2017-01: Pines of North Oaks
  2. L2-2017-02: Cabin 61

VII. **Discussion**
- A. Agenda - Jones

VIII. **Administration Communication –** update from MAWD

IX. **Public Comment**

XI. **Adjourn**

Next regular meeting: August 23rd

Action item

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

MINUTES OF THE BOARD OF DIRECTORS
April 26, 2017

Attendance	
Dan Jones, Chair	City of White Bear Lake
Jim Lindner, Vice Chair	City of Gem Lake
Bob Kermes *(alternate)*	White Bear Township
Marty Long	City of North Oaks
Terry Nyblom	City of Vadnais Heights
Stephanie McNamara	Administrator
Kristine Jenson	Program Manager
Brian Corcoran	Water Resources Manager
Nick Voss	Education & Outreach Coordinator
Tyler Thompson	Water Resource Technician

Others in attendance: Chris Knopik, Liz Towne (Clifton Larson Allen LLP), Greg Wilson (Barr Engineering), Della Young (Young Environmental Consulting Group), Margaret Behrens & Lena Buggs (Ramsey Conservation District), Mark Graham (City of Vadnais Heights Engineer & TEC Chair); Mary Peterson (BWSR); Diane Gorder (NOHOA)
Absent: Rob Rafferty, City of Lino Lakes

I. **Call to Order**
The meeting was called to order at 7:07pm by Chair Jones. A quorum is present for the meeting.

II. **Approval of Agenda**
A motion was made by Long and seconded by Lindner to approve the agenda as presented. Vote: all aye. Motion passed.

III. **Approval of Minutes from February 22, 2017**
A motion was made by Lindner and seconded by Jones to approve the minutes from the February 22, 2017 Board of Directors Meeting. Vote: two aye (Jones, Linder); 3 abstain (Long, Kermes, Nybloom) Motion passed.

IV. **Technical Commission Report to the Board**

A. Activity Summary

Mark Graham presented the TEC Report to the Board and offered to answer any questions. Jones thanked Graham for stepping up to Chair the TEC.

B. April Financial Report

Report submitted to the Board by Stephanie. Projects are now starting to kick in so expenses are starting to show. Otherwise income and expenses are as expected.

V. **New Business**

A. 2016 Audit Report – Chris Knopik and Liz Towne, Clifton Larson Allen LLP

The auditors gave a presentation regarding the 2016 Audit Report. VLAWMO was given an "unmodified opinion" which is the best result for an audit. They provided comments on a few relatively minor issues that will be addressed:

- They also noted that the fund balance policy was out of compliance with the VLAWMO policy – it is lower than what is desired.
- Additionally, VLAWMO does not have an out-of-state travel policy. The travel policy will be discussed later in the meeting.
- The auditor also suggested that VLAWMO should be doing succession planning to ensure that the agency continues to operate well should someone retire or leave.

Jones stated that having the fund balance at 8% is a challenge but a few years ago we were at about 80% and were told to bring it down. Stephanie stated that one of the reasons for the increase in Storm Sewer Utilities fees was to be able to fund budget while also having the proper amount of funds in our reserves. We had been drawing from reserves for the last few years to bring it down and now it is time to find the right balance. It was moved by Linder and seconded by Long to accept the 2016 Audit Report. Vote: All aye. Motion passed.

B. 2016 Annual Report – Nick Voss

Nick presented the annual report to the Board, summarizing the efforts made by VLAWMO in 2016. This report will be sent to the MN Board of Soil and Water Resources, as well as other municipal partners.

Jones asked the other Board members if they would be interested in having a VLAWMO staff member come to their respective municipalities to present our annual report and discuss current activities. Lindner and Long stated they felt it would be helpful. Jones said to ask staff about doing that.

Jones praised Nick on the report and the visuals used to convey the information.

It was moved by Linder and seconded by Long to accept the 2016 Annual Report. Vote: All aye. Motion passed.

VI. 2017 Work Plan

A. Project Reports and action

1. Goose-Wilkinson study update – Greg Wilson, Barr Engineering and Della Young, Young Environmental Consulting Group

Greg Wilson and Della Young presented an update on the study they have been conducting to determine the next best steps for nutrient reduction in Wilkinson and Goose Lakes.

Greg reviewed the past studies that were done on the lakes and analyzed them with information obtained since the Total Maximum Daily Load (TMDL) study.

Della discussed the charrette exercise that was conducted earlier in the year which provided an opportunity for stakeholders and staff to talk about the lakes, the recreational use of Goose Lake, fish and aquatic plant concerns, and water quality standards. Another meeting was held with BWSR, DNR, and PCA to discuss concerns and options for the lakes.

Greg discussed gaps in data which has required more investigation and difficulty in getting meetings schedule which has pushed the schedule of this project back but they plan to have their report ready to present at the May TEC meeting.

The report will describe existing BMPs and discuss operations and maintenance of BMPs with a map identifying them, as well as outfall areas that could use stormwater treatment.

Jones stated that he wonders if Goose can be repaired and at what cost, and then if we don't address it, what sort of "punishment" we would face.

Greg summarized some of the scientific findings he has found thus far. They used modeling to confirm that about 80% of the phosphorus source in East Goose in 2016 was internal loading and 20% stormwater inputs. They then analyzed how the installation of BMPs in the subwatershed would affect the phosphorus. If the load from the subwatershed was reduced 50%, the levels of phosphorus would be nearly the same. When analyzing if we could make an 80% reduction in internal load, it made a large effect on phosphorus. An alum treatment would technically give you the 80% reduction. Thus East Goose Lake shows that it is very dependent on internal load input. West Goose Lake is fed by East Goose Lake and the modeling is showing that 1/3 is internal, 1/3 is stormwater input, and 1/3 is East Goose input. Therefore addressing the internal input at East Goose would have a positive effect on West Goose but there would still need to be treatment for West Goose.

For Wilkinson, he feels the TMDL didn't account for some of the subwatershed inputs and he will continue to look at the inputs to the north of the lake.

At this point, he foresees recommending chemical treatment to East Goose and address untreated runoff during redevelopment. For West Goose, a lot of it hinges on the East Goose input and to analyze untreated stormwater corner of the lake. For Wilkinson, he would like to further assess sources from the subwatershed and to assess the efficacy of the fish barrier to keep the rough fish out.

Jones thanked Greg and Della for taking the time to come out and make the presentation.

2. Sucker Channel restoration project JPA consideration – Kristine Jenson

Kristine has been working with Ramsey County Parks (Parks) for the last few years to pull together a project to restore the deteriorating channel entering Sucker Lake. This project has 4 partners: VLAWMO, Parks, St. Paul Regional Water Service (SPRWS), and Ramsey Conservation District (RCD). After many iterations, we have arrived at a plan and joint powers agreement (JPA) that all parties support. VLAWMO has budgeted $65,000 to this project. A portion of this was spent in the feasibility and early designs of the project. The rest of VLAWMO's funds will go towards the native buffer installation along the channel, a match necessary for the Clean Water Fund Grant received by RCD, educational signage, and 4 years of buffer maintenance. Parks is paying costs upfront and will bill VLAWMO for our portion. The project is expected to begin this fall and the planting portion may have to wait until spring 2018.

Staff recommends approval of this proposal.

It was moved by Linder and seconded by Long to approve the Sucker Channel JPA and authorizes the Board Chair and the VLAWMO Administrator to sign the documents. Vote: all aye. Motion passed.

3. Lambert Creek Koehler restoration project – Brian Corcoran

Brian reported that the Koehler restoration project along Lambert Creek is nearing completion. This project included streambank stabilization, erosion repair and protection, and the installation of a drop structure. The final activities this spring include some grading work, additional erosion blanket, and plantings.

4. Whitaker Treatment Wetlands – Brian Corcoran

The Bacterial Treatment Wetland Pilot Project is moving forward quickly and construction is scheduled to begin the first week of October. The engineers will be sending 85% complete plans and spec sheets for the project on May 5th for staff and Township review along with bid documents and 100% plans ready to go out May 19th. Staff is asking for authorization to proceed with the RFP for the project construction on May 19th so the Board will be able to choose a construction contractor at the June 28th Board meeting.

Jones stated that when this project is completed, we need to make sure that we give a lot of praise to White Bear Township for their partnership on this project.

It was moved by Lindner and seconded by Kermes to authorize staff to proceed with and RFP for project construction. Vote: all aye. Motion passed.

5. Pennington Place Delineation – Brian Corcoran

With the back-to-back significant storm events that we have been experiencing lately, Lambert Creek/Ditch 14 has been flooding residents' backyards near Pennington Place in Vadnais Heights. The section in question is just upstream from Edgerton St. in Vadnais Heights, in the Lower Lambert Lake area. This section of ditch is wetland and was historically a lake. Fill was most likely brought in to construct the housing development. The houses are not flooding, but backyards along the Creek are. Residents believe that this section of ditch is silting up and the down trees in the ditch and culvert/storm water drains are aiding the problem.

At the October 26, 2016 Board meeting staff were directed to conduct a delineation of the wetlands along Pennington Place at a cost not to exceed $5000. Staff sent an RFP out to 4 delineators and posted the RFP on the website. Four proposals were received for delineation services:

Midwest Natural Resources - $1500
Kjolhaug - $1950
Sambatek - $1300
Earth Science - $3536
The delineation would both address jurisdiction of wetland, along with knowing the exact boundary of the wetland into residents' yards. This information is crucial to moving forward on what can be done, if anything, to address the residents' concerns. Once this preliminary step is completed, we hope to have a better idea on what the next steps could be. A feasibility study on this section of creek could be undertaken to determine possible options and costs that may keep the yards more dry. Some possibilities may include dredging this section of the creek, building a berm, including drain tile behind the berm, raising residents back yards, and meandering creek/ditch through wetland.
TEC and Staff recommend the Board accept the proposal from Sambatek to perform the delineation.
Nyblom asked if the elevation of Lambert Creek is high or if it is just a perception. Corcoran said we haven't done elevation studies. He also stated that the creek could have silt within it however all the culverts are flowing well whenever staff has checked on them. Brian stated the neighborhood was built in a floodplain/wetland so the issues are not a surprise. Their homes aren't getting water in them but the backyards are wet. The homeowners would like to put more fill in their backyards to raise them up and thus the delineation would determine what activities could occur and where. Stephanie mentioned the installation of the weir to create Lambert Lake in 2004 was meant to slow the flow of water which also allows for more particles to deposit.
It was moved by Nyblom and seconded by Lindner to approve the bid from Sambatek to complete the wetland delineation at Pennington Place for an amount not to exceed $1300. Vote: all aye. Motion passed.

B. Program Activity

1. Monitoring & Analysis – Brian Corcoran & Tyler Thompson

Year 4 of Bacteria Sampling

We will be doing our last year of the Bacterial Sourcing Study. We will concentrate on the Goose Lake and Whitaker subwatershed during wet weather conditions. This will complete our E. coli sourcing study and the results of the 4-year study will be presented in the winter of 2018.

Automated Sampler Location

Tyler discussed the plan for the automated sampler in 2017. In concert with VLAWMO's efforts to identify projects in the Birch Lake subwatershed, staff will be installing the automated sampler to monitor storm flow into Birch Lake. The sampler, new in 2016, will be installed at the intersection of 4th St and Otter Lake Rd to take storm samples from the wetland on the northeast corner of the intersection. This wetland takes stormwater input from further east down 4th St, and north from Otter Lake Rd, and eventually outlets into a storm sewer under this intersection and flows into Birch Lake, one of VLAWMO's top water quality lakes.
The 4th and Otter wetland is the most likely location for a retrofit project. Installing the automated storm sampler in this location will give a baseline for nutrients and flow exiting the system to Birch Lake during storm conditions, and could be used for future project design.

2. Education and Outreach – Nick Voss

A Community Blue Grant request has been received for the White Bear Water Symposium via the White Bear Lake area school district. This even is planned by the City of White Bear Lake and the school district. They are requesting $700 to be used towards an educational theater

presentation. Funds would be used for the direct costs of the presentation as well as for the cost of food. They have matching funds which exceed the grant requirements. Staff recommends approval of this grant.
It was moved by Lindner and seconded by Kermes to approve the Community Blue Grant in the amount of $700 for the White Bear Lake School District. Vote: all aye. Motion passed.
Nick invited the Board to help staff the VLAWMO booth at upcoming community events. Information regarding the events were included with the staff memo.

3. Landscape Grant Program update – Kristine Jenson

The 2017 season of the Landscape Grant 1 program is off to a great start. As of the April Technical Commission meeting, we have approved 5 grants for homeowner projects and one rainbarrel grant. Four grants were considered in April alone! As of right now, there is about $10,000 left in the program and there is a lot of interest from homeowners to apply, especially after our successful raingarden workshop on April 12. The native plant workshop on May 10 will likely produce more interested applicants.

C. Operations and Administration – Stephanie McNamara

1. Landscape Level 2 policy update

Given the growing interest and the potential for substantial water quality improvements for the grant program funding the committee is recommending that the funding continue in at least the current level for 2018. They would direct staff to continue with the current Landscape 2 guidance for 2017 and spread the available funding ($30,000) to generate the most effective projects possible. This could mean partial funding of more than one project. They would further direct staff to develop a prioritization screening and available funding matrix for consideration by the Board later this year, to be available for use on the 2018 projects. The screening should considered multiple parameters including connectivity to water bodies, contributing drainage area characteristics, volume reduction, erosion & sediment control, wildlife habitat and public outreach.
Jones stated that a few years ago it was decided that VLAWMO needed to start implementing high quality projects and that the low cost SSU fees are likely not going to be possible in order to get these installations in the ground. So putting our money in the ground is what is important and should be supported.

2. Out of State travel policy

The 2016 audit has one legal finding regarding the lack of an out of state travel policy. No one from VLAWMO has traveled out of state on VLAWMO business but to ensure we have a policy should that occur in the future, it is wise to have it already prepared and approved.
Minnesota Statute Ch. 471.661 has the following language:

471.661 OUT-OF-STATE TRAVEL

The governing body of each statutory or home rule charter city, county, school district, regional agency, or other political subdivision, except a town, must have on record a policy that controls travel outside the state of Minnesota for the applicable elected officials of the relevant unit of government. The policy must be approved by a recorded vote and specify:

(1) when travel outside the state is appropriate;
(2) applicable expense limits;
(3) procedures for approval of the travel.

The policy must be made available for public inspection upon request. Subsequent changes to the policy must be approved by a recorded vote.
The Policy and Personnel Committee considered this issue at their 4/24/17 meeting and have a policy prepared for Board consideration. See below:

Out of State Travel Policy
Adopted by the Board of Directors date: April 26, 2017
Voting record:

Jones yea, Lindner yea, Rafferty absent, Long yea, Nyblom yea,, Kermes yea,

Out of State travel paid for the Vadnais Lake Area Water Management Organization (VLAWMO) will be limited and any VLAWMO funds will be used only if approved before the proposed travel with a record of approval and all expenses kept on file as per the records retention policy. The Administrator will approve or disapprove travel by the staff and the Board will approve or disapprove travel expenses for the Administrator and members of the Board. Expenditures beyond the budgeted amount will require Board approval.

1. *The approval must specify why the travel is appropriate to the purposes of VLAWMO;*
2. *Any applicable expense limits; and*
3. *Any other procedures used in this approval.*

This policy will be available for public inspection upon enactment. Any changes to the policy will be made with a recorded vote.

Jones stated that this policy is for Board of Directors only and that staff will work on a policy for employees.

It was moved by Lindner and seconded by Kermes to adopt the out of state travel policy as presented. Vote: all aye. Motion passed.

3. Preliminary Budget 2018

Stephanie reviewed the preliminary numbers for the 2018 budget. Assumptions have to be made in regards to some costs and that partners would need to brought in, along with grants to help pay for capital improvement projects. Jones said that special assessments by the watershed should be investigated further. Stephanie said it is legally possible for us to impose special assessments but we haven't done it before so it would be a new thing to do. Jones asked if we would have any better ideas as to possible grants and funding from partners for some of our projects. Outside funding sources wouldn't be known in time for approving the 2018 budget but we would hopefully have a better idea of the costs for some of planned projects.

Jones stated that other watersheds charge more overall than VLAWMO does. An average homeowner in White Bear Lake that is within one of the other three watershed districts of the area pay between $70-$90 per home.

We have been using reserves for about 5 years to help cover our increasing costs and now the SSU fees need to be reflect our goals and plans for the watershed.

VII. Report from the Chair

Jones said he wants to remove the Report from the Chair or from the Directors. Nyblom asked about moving Public Comment up in the agenda. Jones said he didn't have a problem with that but would want them to speak on items relating to the agenda and they would have to sign up. Long said we can put it at the beginning of the meeting and limit them to 3 minutes. Jones said lets table this topic and readdress it at the next meeting. He thinks we could just add "Discussion Item" rather than reports from the Chair, directors or Adminsitrator.

VIII. Administrator's Report

IX. Director's Reports

X. Next Regular Meeting – June 28, 2017

XI. Public Comment

XII. Adjourn

A motion was made by Lindner and seconded by Kermes to adjourn at 9:11 pm. Vote: all aye. Motion passed.

Minutes compiled and submitted by Kristine Jenson.

VLAWMO
Vadnais Lake Area
Water Management Organization

800 County Road E E, Vadnais Heights, MN 55127
www.vlawmo.org; Office@vlawmo.org

June 2017

To: the Board of Directors

From: Stephanie McNamara

Re: Request for legal opinion on the scope of VLAWMO's ditch authority as well as the ability and process for assessing to fund capital projects in the watershed

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).

Drainage Responsibilities

VLAWMO accepted the authority to manage County Ditch 14 (Lambert Creek), its branches and County Ditch 13 (Dillon) in 1987. This requires VLAWMO to repair, improve and maintain the transferred drainage systems and potentially construct new drainage systems. Up to now, VLAWMO has chosen to 'manage the ditch' by monitoring it, conducting studies and doing water quality & flooding projects in identified locations. Complex concerns with potentially expensive solutions may need to be addressed. This effort seeks to define VLAWMO's role as it works with its municipal partners and other agencies to address drainage issues, repairs and improvements and the possible assessment process.

There are **two attached documents** regarding funding options for VLAWMO. I have highlighted the parts pertaining to new fund generation.

- **Language in our JPA (see highlighted JPA)**. Four options are mentioned in the JPA, with two of the income methods are already in use: storm sewer utilities (SSU) and fees. The SSU is our main source of income. Fees are very minor and mostly relate to Wetland Conservation Act administration. The 3rd option is to tax properties like watershed districts however, VLAWMO would have to go to the Legislature to get Ad valorem taxing authority. [While there is precedent (Mississippi WMO in Minneapolis), the political climate may not be conducive.] The 4th option is to use Special Assessments that would be collected by our municipal JPA members. Subwatersheds or other government financing areas could be used to define who would pay the extra money for a project. I believe this means, for instance, that White Bear Lake could charge a special assessment in a benefiting area to fund a project for Goose Lake.
- **Comparison Water Management Revenue Streams for Metro WMO's & Watershed Districts MN Statute 103B & 103D**. This information piece from the state is consistent with our JPA. VLAWMO, as a JPA WMO may raise funds generally from the whole watershed or *possibly* by subwatersheds. As I understand it, if and how well subwatershed assessment works depends on the language in the JPA and willing JPA members. Special assessment areas may be set up within VLAWMO. (e.g. Lambert Creek or Goose Lake subwatersheds.

Financing Capital Improvement Projects within the VLAMWO Joint Powers Agreement. CIP financing appears in a couple of places, (1) Duties of the Board and (2) Financing VLAWMO. VLAWMO has not used this process. It appears to include the engineering and administrative costs of a project. When a potential project is identified, VLAWMO needs to provide the plans and details and how the costs

should be allocated based on benefit. This may be a bit of chicken and egg situation. How do we get the engineering detail and reliable costs without hiring a consultant (e.g. Barr with Goose & Wilkinson)? Do we just hope we can allocate those costs over a subwatershed retroactively?

VLAWMO JPA Language

Section VI - Responsibilities and Duties of the Board of Directors:

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.

Section VII - Financing VLAWMO,

Subd. 4 Capital Improvement Projects Program and Funding.

Subdivision 4. Capital Improvement Projects Program and Funding. On or before July 1 of each year the Board shall prepare a capital improvements program and budget for projects to be started or completed in the following year as described in the Water Plan. Each proposed project shall be described and its estimated cost and time for completion shall be provided. Only projects described in the Watershed Management Plan or its amendments may be included in the capital improvement budget. Funding in the capital improvement budget shall be calculated as follows:

1) If money raised by the Special tax levies to be used for Capital Projects, the Members shall be provided the opportunity to review and approve the amount of the tax levy that will be used for Capital Projects within sixty (60) days of receipt of the Board's Capital Improvement Budget;
2) If a capital project is to be funded wholly or in part by one or more governmental unit(s), they will be provided the opportunity to review and approve or disapprove the capital improvement budget within sixty (60) days of receipt of the Board's Capital Improvement Budget; and
3) If service fees, grants, interest or other funding sources are available the source and amounts of such funds shall be shown.
If the capital improvement budget is approved, as provided above, each governmental unit shall contribute its budgeted share of the cost of constructing said capital improvement projects.

Discussion: Our CIP budget must be done by July 1st and the projects must be described in the Water Plan. If money is going to come from the Members (our communities) through Special tax levies or

other sources, they have up to 60 days to review and approve or disapprove the CIP budget and the CIP tax levy. There could be one or more members involved. If approved by the member then each affected government unit will pay the budgeted share. Where the municipality gets the funding is up to them. The assessment method is one option.

> Subdivision 5. **Governmental Unit Financing**. Members may establish a watershed management tax district in the Area for the purpose of paying costs of the engineering and planning required to develop a watershed management plan for the Area. After the plan is adopted and approved, a tax district may be established for the purpose of paying capital costs of projects described in the plan (including normal and routine maintenance of projects). If required, the tax district shall be established by ordinance adopted after a hearing by a local government unit, following provisions of Minnesota Statutes, Chapter 103B.

Discussion: 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.
    - How could this best be done under 103B, 103E and elsewhere in statute? Is there something more efficient that ditch law (103E) that can be used? If VLAWMO & its members want to set up an assessment area (perhaps a subwatershed) would it need to use ditch law to determine benefit? Or could a subwatershed be sufficient delineation of the benefiting area?
    - How does 103B work for this type of work?
    - If we have a neighborhood, municipality or other group requesting maintenance or improvement to a section of ditches 13 or 14, what is VLAWMO's responsibility to that request?
2. Funding CIPs by assessment of subwatershed area:

- Given State statute and our JPA, is the only method of funding a CIP by subwatershed to go through the member communities? Could VLAWMO do that on our own?
- Is our JPA language sufficient to set up an assessment process with municipal partners? How would we work with our municipal members or other agencies on this?
- Obviously, VLAWMO would try to work with all stakeholders upfront to develop consensus on capital projects. But if VLAWMO provided evidence of need, estimated costs, would the members still have the option to turn down the project? Would VLAWMO have recourse through the JPA Section VI, Subdivision 6?
- Our current Storm Sewer Utility Rule does not address special districts but do SSUs do those at times - where a specific subwatershed could pay more to pay for additional costs of CIP's? If so, is there language that could be considered?

provided to the public requesting this information, and follow notice requirements outlined in Minnesota Statutes, Section 13D.04. Meetings shall be conducted in accordance with rules adopted by the Board.

Subdivision 5. Voting. Each Director shall have one (1) vote in all matters, as follows:

1) approval of the proposed annual VLAWMO operating budget shall require approval of a simple majority of all Directors;

2) approval of capital improvement projects will require approval of two-thirds (2/3) of all Directors; and

3) approval of all others matters will be determined by a simple majority of Directors present and voting.

Subdivision 6. Committees. The Board may appoint such committees and subcommittees as it deems appropriate. At least one Board member shall be the appointed as the Chairperson of each committee and all committees shall regularly report their activities to the Board.

Subdivision 7. Public Participation. The Board may appoint such committees and subcommittees composed of citizens as needed to provide for public participation and input in watershed activities and the responsibilities of VLAWMO. Such citizen committees shall be advisory.

SECTION VI
RESPONSIBILITIES AND DUTIES OF THE BOARD OF DIRECTORS

Subdivision 1. Policies and Procedures. The Board shall adopt rules and regulations as it deems necessary to carry out its duties and the purpose of this Agreement. Such rules and regulations may be amended from time to time in either a regular or special meeting of the Board provided that notice of such proposed amendment has been given to each Director at least ten (10) days prior to the meeting at which the proposed amendment will be considered. These rules and regulations, after adoption, shall be recorded in the VLAWMO policy book.

Subdivision 2. Watershed Management Plan (Plan). The Board shall adopt a water management plan, as required by the Act. The Plan shall be subject to the appropriate governmental unit review as required by the Act.

Subdivision 3. Data. The Board, in order to give effect to the purposes of the Act may:

1) Acquire and record appropriate data within the Area; and

2) Establish and maintain devices for acquiring and recording hydrological or other data within the Vadnais Lake Area Watershed.

Subdivision 4. Local Studies. Each Member reserves the right to conduct separate or concurrent studies on any matter under study by VLAWMO. The Member shall make every effort to coordinate its studies with the VLAWMO in order to maximize the use of resources.

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 through103H.

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.

Subdivision 9. Storm and Surface Waters. The Board shall regulate, conserve and control the use of storm and surface water within the Vadnais Lakes Area Watershed pursuant to its Watershed Management Plan.

Subdivision 10. Entrance upon Land. To the extent permitted by Minnesota Statutes, the Board or its designated representatives may enter upon lands within or outside the Vadnais Lakes Area Watershed to make surveys and investigations to accomplish the purposes of VLAWMO and the Act.

Subdivision 11. Legal and Technical Assistance. The Board may obtain and provide legal and technical assistance in connection with its on-going operations and projects, as well as in matters of litigation or other proceedings between one or more of its Members and any other political subdivision, commission, board or agency relating to the planning or construction of facilities to drain or pond storm waters within the Area.

units in the Area shall submit its water management plan to the Board. The Board shall within sixty (60) days approve or disapprove the plan or parts thereof. If the Board fails to complete its review within the prescribed period, and unless an extension is agreed to by the Member or other local governmental unit, the local plan shall be deemed approved consistent with applicable state laws.

Subdivision 7. Appeals of Decisions and Recommendations of the Commission. Members shall comply with Commission's determinations as to the force and effect of the Watershed Management Plan, the Local Water Management Plans and any cost allocations for improvements initiated pursuant to these plans.

Any governmental unit which disputes a determination of the Commission as to force and effect of the Watershed Management Plan, any Local Water Management Plan, or the cost allocations for improvements, initiated pursuant to these plans, may appeal the recommendation or decision to the Board within thirty (30) days of receipt of such written notice of such determination.

Should the appeal not be completed to the satisfaction of all parties, a party may submit the dispute to arbitration. Arbitration shall be conducted in the following manner:

1) A governmental unit shall have thirty (30) days from receipt of the written decision on the appeal by the Board to submit a dispute to arbitration by giving written notice to an officer of the Board;

2) The Board of Arbitration shall consist of three Members, one appointed by the governmental unit initiating the arbitration, one appointed by the Board and one appointed by the Chief Administrative Law Judge of the State of Minnesota, if willing to do so and if not, by the Chief Judge of the Ramsey County District Court. The third member so appointed shall preside at the arbitration hearing;

3) The arbitration cost of the neutral arbitrator shall be divided equally between VLAWMO and the government unit initiating the arbitration; and

4) Arbitration shall be conducted in accordance with the Uniform Arbitration Act (Minnesota Statutes, Chapter 572), except as modified above.

Subdivision 8. Other Duties. The Commission shall exercise such other duties necessary and incidental to the implementation of the purposes set forth herein as authorized by the Board.

SECTION VIII
FINANCING VLAWMO

Subdivision 1. Annual Operating Budget. On or before September 1st of each year, the Board shall prepare a proposed annual operating budget for the following calendar year. The budget shall provide funds to operate VLAWMO for the next calendar year. The proposed operating budget and the sources for these funds shall be recommended for approval to the Members.

The annual operating budget may be funded by one or more of the following:

1) An authorized special tax levy authorized by the State of Minnesota for an amount approved by the Members;

2) VLAWMO operates Storm Water Utility authorized by the State of Minnesota and approved by the Members;

3) Annual payment from each governmental unit party to this agreement and other entities based on an annual assessment as determined in Subdivision 2 in this Section; and

4) Service fees, grants, interest or other funding sources as available.

Each Member shall pay its annual assessment in the following manner:

1) The entire amount shall be due by January 31st of the year due; or

2) One-half (1/2) of each Members entire amount shall be due by January 31 of the year due and the second one-half (1/2) of the entire amount shall be due by August 31 of the year due.

Failure to pay the required amounts by the due dates will cause a one percent (1%) per month service fee to be added to the unpaid amount due.

Subdivision 2. Budget Meeting and Approval. The proposed annual Operating and Capital Improvement budget for the next calendar year shall be prepared by September 1 each calendar year.

Subdivision 3. Annual Assessment for Services.

The annual contribution of each Member or other entity shall be calculated upon the following formula:

1) Forty percent (40%) based upon the assessed valuation of all real property of each government unit within the Area;
2) Forty percent (40%) based upon the total area of the property within each governmental unit with the Area; and
3) Twenty percent (20%) based upon the population of each governmental unit within the Area.

Subdivision 4. Capital Improvement Projects Program and Funding. On or before July 1 of each year the Board shall prepare a capital improvements program and budget for projects to be started or completed in the following year as described in the Water Plan. Each proposed project shall be described and its estimated cost and time for completion shall be provided. Only projects described in the Watershed Management Plan or its amendments may be included in the capital improvement budget. Funding in the capital improvement budget shall be calculated as follows:

1) If money raised by the Special tax levies to be used for Capital Projects, the Members shall be provided the opportunity to review and approve the amount of the tax levy that will be

used for Capital Projects within sixty (60) days of receipt of the Board's Capital Improvement Budget;

2) If a capital project is to be funded wholly or in part by one or more governmental unit(s), they will be provided the opportunity to review and approve or disapprove the capital improvement budget within sixty (60) days of receipt of the Board's Capital Improvement Budget; and

3) If service fees, grants, interest or other funding sources are available the source and amounts of such funds shall be shown.

If the capital improvement budget is approved, as provided above, each governmental unit shall contribute its budgeted share of the cost of constructing said capital improvement projects.

Subdivision 5. Governmental Unit Financing. Members may establish a watershed management tax district in the Area for the purpose of paying costs of the engineering and planning required to develop a watershed management plan for the Area. After the plan is adopted and approved, a tax district may be established for the purpose of paying capital costs of projects described in the plan (including normal and routine maintenance of projects). If required, the tax district shall be established by ordinance adopted after a hearing by a local government unit, following provisions of Minnesota Statutes, Chapter 103B.

Subdivision 6. Reserve Funds. The Board may accumulate reserve funds for the purposes herein mentioned and may invest funds of the Board not currently needed for its operations in the manner and subject to the laws of Minnesota applicable to statutory cities. Any and all reserve funds must be clearly indicated on the annual financial audit provided to the Members.

Subdivision 7. Gifts; Grants; Loans. VLAWMO may, within the scope of this Agreement, accept gifts, apply for and use grants or loans of money or other property from the United States, the State of Minnesota, a unit of government or other governmental unit or organization or any person or entity for the purposes described herein; may enter into any reasonable agreement required in connection therewith, shall comply with any laws or regulations applicable thereto, and may hold, use and dispose of such money or property in accordance with the terms of the gift, grant, loan or agreement related thereto.

Subdivision 8. Disbursements. All VLAWMO disbursements shall be sent to the Secretary-Treasurer of the Board and the finance officer of the Technical Commission for review. Checks issued by VLAWMO shall have two signatures. Officers and the VLAWMO Administrator may be authorized to sign checks. An Officers bond shall be maintained by VLAWMO in the amount of at least $10,000. VLAWMO will be responsible for paying the premium on said bond.

103B and 103D Water Management Revenue Streams for Metro WMOs

103 Fiscal Authorities And Programmatic Activities	Available Funding Options							
	All WMOs [1]		County, City, Township	Additional for Watershed Districts				
	103B.241 District-wide Ad valorem	**103B.251** Capital Improvement Payment by County	**103B.245** Special Taxing District (Allows sub-area taxation)	**103D.729, 103D.730, 444.075 (Subd. 2a)** Water Management District/Stormwater Utility	**103D.905 (Subd. 3)** General Fund (Capped @ $250,000)	**103D.905 (Subd. 3)** Basic Water Management Project	**103D.905 (Subd. 8)** Survey & Data Acquisition	**103D.345** Permits
Administration	X			X	X			
Management Plans	X		X		X			
Monitoring & Data Collection	X			X	X		X	
Special Studies & Research	X			X	X		X	
Regulation & Permits	X				X			X
Projects & Programs	X		X	X	X	X		
Capital Improvements in Plan	X	X	X	X	X	X		

103 Fiscal Authorities And WMO Types	**District-wide Ad valorem** [103B.241] Pay costs to prepare plan and implement projects in an approved plan.	**Capital Improvements Certification to County for Payment** [103B.251] Projects must be in an approved CIP.	**Special Tax District Local Government Unit** [103B.245] Pay for costs of plan development and capital costs identified in an approved CIP.	**Stormwater Utility Fees or Charges**
Watershed Districts (Operating with approved 103B.201 plan)	X WD may also use 103D.905 to raise funds on an ad valorem basis.	X WD may apportion costs district-wide, or *possibly* by subwatershed units and require the establishment of more than one tax district in the watershed.		X 103D.729, 103D.730, 444.075, Subd. 2a Provides WDs the ability to establish water management districts and charges to pay costs for stormwater projects.
[1] **Joint Powers WMO** (Acting as its own entity and authorized in the JPA)	X WMO may raise funds on an ad valorem basis if listed as a special taxing district in chapter 275.066.	X WMO may apportion costs district-wide, or *possibly* by subwatershed units and require the establishment of more than one tax district in the watershed.		
Municipalities (Cities or towns acting as a member of a JPA WMO)	X Municipalities have authority under chapters 426-435		X Municipalities can set up special taxing districts that encompass the entire city or subwatershed units (as defined by the WMO) within the city.	X Municipalities have authority to establish under chapter 444.075.
County (Acting as WMO)	X Counties are listed as a special taxing district in chapter 275.066 (23).	X Counties are listed as a special taxing district in chapter 275.066 (23).	X County may apportion costs by subwatershed units or by cites and towns and may establish one or more watershed management tax districts.	

1 Funding options within the bold boxes are available to all Watershed Management Organizations in the Metro, i.e. joint powers agreement or watershed district, however specifically note 103B.241 limitation to JPA WMOs.

* All funding options are outside of levy limits.
* Watershed Districts may fund projects with Special Assessments under 103D.601, .605 or .701.

October 17, 2014

800 County Road E East, Vadnais Heights, MN 55127
www.vlawmo.org

Date: June 22, 2017

To: the Board of Directors

From: Brian Corcoran, Tyler Thompson

Re: V.A. Lambert Creek – Lambert Lake/Pennington – Koehler Flume

The delineation for the Pennington Place parcels 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/Ditch14. Wetland is a type 1 PFO1Ad seasonally flooded floodplain. Wetland edge is shown in blue below. The Corps of Engineers also has jurisdiction over the aquatic resources identified in the delineation report.

Additionally, a ditch walk was attended on June 14th examining Lambert Creek and its branch ditches in Vadnais Heights. 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 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. Also, 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.

EST 1983
VLAWMO
Vadnais Lake Area
Water Management Organization

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

June 22, 2017
To: The VLAWMO Board of Directors
From: Kristine Jenson, Program Manager
Re: V.B. Goose-Wilkinson Study Update & 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.

Table 4-1 Summary of Water Quality Improvement Options

Water Quality Improvement Option	Estimated Annual TP Reduction (lbs/yr)	Planning Level Opinion of Potential Costs	Annual Cost per Pound TP Removed ($/lb)
Option 1—Retrofit Lake Bay for Improved Stormwater Treatment	10	$100,000	$10,000
Option 2—Construct Off-Line Filtration System for Low Flows	25	$300,000	$12,000
Option 3—Construct Pond On-Line With 36"-dia. Storm Sewer	25	$300,000	$12,000
Option 4—Infiltration Pipe Upstream of Storm Sewer Outfall to East Goose Lake	5	$50,000	$10,000
Option 5—Infiltration Pipe on School Property	25	$100,000	$4,000
Option 6—Alum Treatment of West Goose Lake	100	$100,000—$130,000	$1,000—$1,300
Option 7—Alum Treatment of East Goose Lake	800	$400,000—$500,000	$500—$625

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

EST 1983
VLAWMO
Vadnais Lake Area
Water Management Organization

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

lake bottom that occurs on the Goose Lake basins.

Staff hosted a technical meeting with Goose Lake partners on June 19th to discuss the next steps and if they are willing to cooperate on an alum treatment for the lake(s). Alum treatments are quite expensive and VLAWMO could pursue grants this fall to help pay for a project such as this. Barr stated that they could assist with gathering further data necessary for us to produce a strong grant application at a cost of $10,000. The partners felt this was a worthy investment in order to have an application with the best chances at approval. Stephanie informed the partners that she could ask the VLAWMO Board to fund up to $5000 from its current budget to go towards this but is asking the partners to help fund the rest of it. I received an email today from the St. Paul Regional Water Utility stating that they would be willing to give another $5000 to have Barr do the diagnostic work necessary for the application.

We also discussed the potential of treating the lakes with spent lime rather than alum. Laboratory testing in the 1990s showed promising nutrient reductions and 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 as well as through the City of White Bear Lake. Barr said they could conduct a study with the help of VLAWMO for $15,000-$30,000. At the June 19th meeting, the partners thought this study could possibly be done without needing to pay a consultant and options were discussed. John Manske from Ramsey County raised concerns about the efficacy of an alum or spent lime treatment due to the specific dynamics in the two basins. Another technical meeting is scheduled for June 26th and Greg will be in attendance to help answer questions or concerns. I will bring an update to the Board for the meeting on June 28th.

At the time of the writing of this memo, we have 2 items for the Board to consider and act upon. These items may change based on what is learned at the June 26th meeting.

1. Should VLAWMO hire Barr to assist with producing a strong grant application for alum treatments on East and West Goose Lakes?

2. Should VLAWMO pursue a spent lime study? Kristine will provide the Board with more information as to costs and logistics of this endeavor after the June 26th meeting.

East Goose, West Goose and Wilkinson Lakes Feasibility Study

Prepared for
Vadnais Lake Area Water Management Organization (VLAWMO)
In partnership with Young Environmental Consulting Group

May, 2017

East Goose, West Goose and Wilkinson Lakes Feasibility Study

Prepared for
Vadnais Lake Area Water Management Organization (VLAWMO)
In partnership with Young Environmental Consulting Group

May, 2017

4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435
952.832.2600
www.barr.com

East Goose, West Goose and Wilkinson Lakes Feasibility Study

May, 2017

Contents

List of Tables

List of Figures

1.0 Project Background and Goal-Setting

The Vadnais Lake Area Water Management Organization (VLAWMO), the Minnesota Pollution Control Agency (MPCA) and other stakeholders have collected a significant amount of monitoring data and completed Total Maximum Daily Loads (TMDLs) and numerous additional studies to better understand and address excess phosphorus loading to East and West Goose Lakes and Wilkinson Lake. In addition, nearly 19,000 pounds of bullheads were removed from Goose Lake between 2012 and 2015. Barr Engineering Company (Barr) and Young Environmental Consulting Group were retained by VLAWMO to revisit whether the current lake water quality standards are realistic or attainable and complete a feasibility study that will determine the best options for achieving significant nutrient reductions in all three lake basins, with a priority to work towards delisting the impaired waters within the next five years.

Figure 1-1 shows the topography, watershed divides and drainage patterns for East and West Goose Lakes while the same information, including subcatchments and monitoring stations, is depicted for Wilkinson Lake in Figure 1-2.

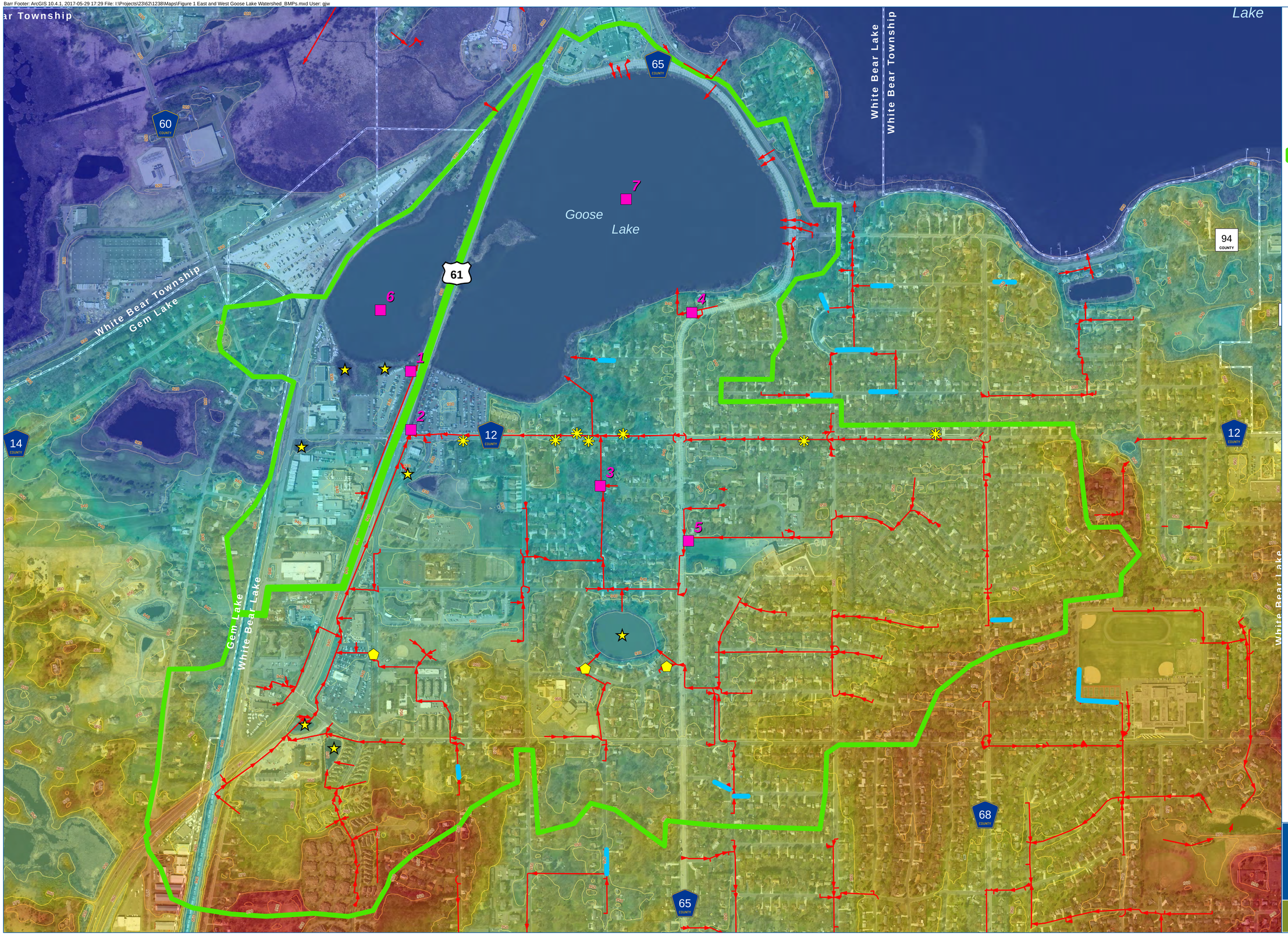
1.1 Summary of Lake TMDLs and Recent Studies

In preparing for the stakeholder charrette, the Barr/Young Environmental team systematically reviewed reports and data collected on Goose Lake and Wilkinson Lake, including the total maximum daily load (TMDL) report and implementation plan, sustainable lake management plans, storm sewer and treatment practice plans, proposed redevelopment plans, fish and aquatic plant survey reports, bathymetric surveys and internal loading analyses. Through the stakeholder participation process and personal communications we also became more aware of the potential for boating impacts on water quality changes in the Goose Lake basins and the conservation planning efforts to limit significant land use changes in the Wilkinson Lake watershed.

The TMDL report (Wenck, 2013) and implementation plan (VLAWMO, 2014) called for the following total phosphorus load reductions for the respective lakes:

- 91% reduction for East Goose Lake—corresponds to 96% reduction of internal load and 63% reduction from stormwater runoff
- 70% reduction for West Goose Lake—corresponds to 71% reduction of internal load, 77% reduction from East Goose Lake and 86% reduction from stormwater runoff
- 63% reduction for Wilkinson Lake—corresponds to 76% reduction from stormwater runoff

Anoxic sediment phosphorus release rates determined from laboratory experiments on Goose Lake cores (James, 2010 and Wenck, 2014) were approximately an order of magnitude lower than the release rates used for the lake water quality modeling in the TMDL study. The difference in internal load was attributed to resuspension associated with motor boat activity (Wenck, 2013). A subsequent study (UW Stout and Wenck, 2015) of sediment resuspension as a potential phosphorus source indicated that Goose Lake sediment has a high potential for resuspension, but does not release or desorb phosphorus and plays a minor role in contributing bioavailable phosphorus to the lake.



Lake Watersheds
Storm Sewer

Existing BMPs

- POND
- RWG
- SP
- Storm Retention Area Boundary
- 10-Foot Elevation Contour
- 2-Foot Elevation Contour
- Recommended BMPs

Aerial Imagery: Ramsey County/MnGeo 2016

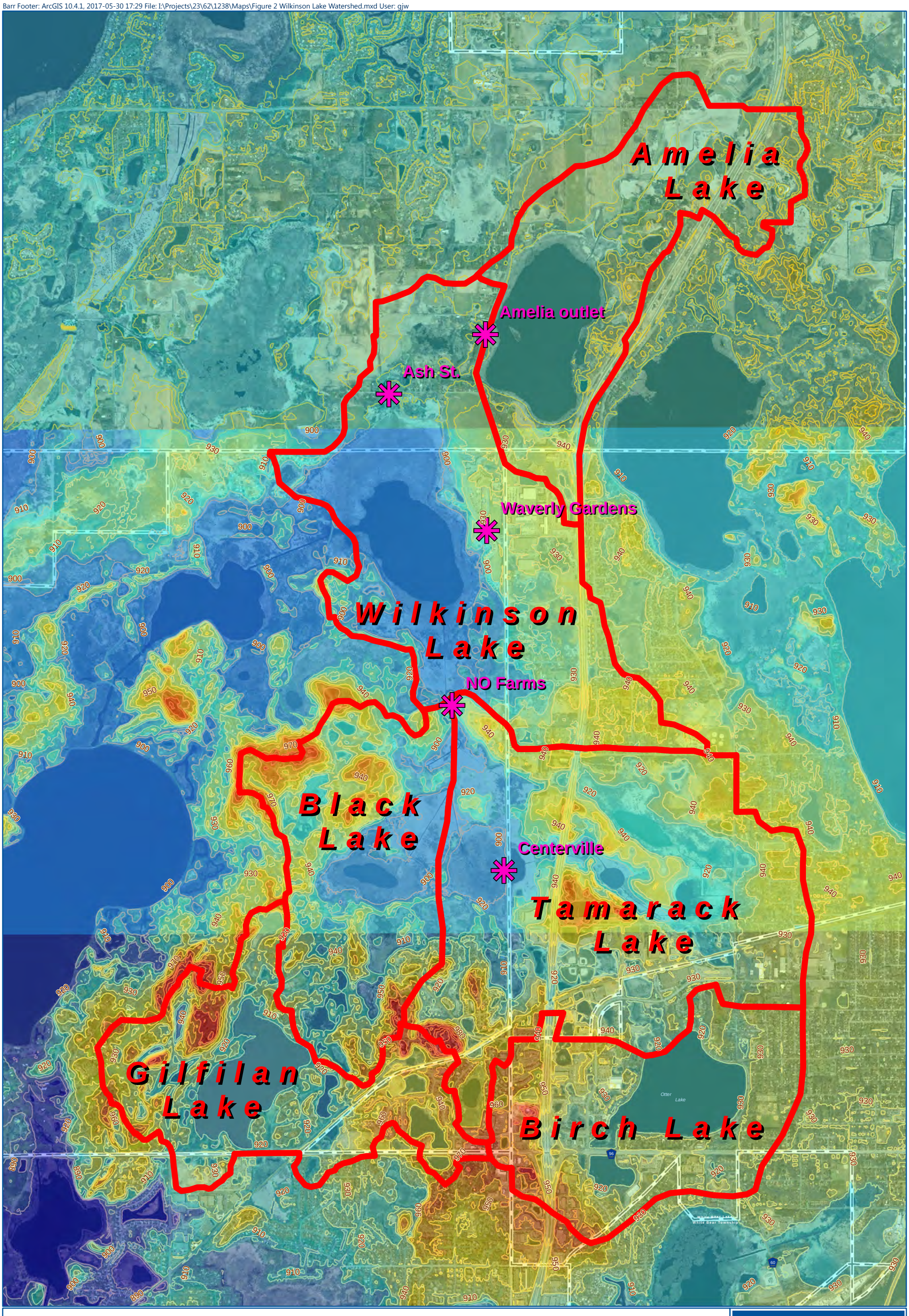
BARR

N

0 500 1,000
Feet

EAST AND WEST
GOOSE LAKE WATERSHED
Vadnais Lakes Area
Watershed Management
Organization

FIGURE 1-1



Wilkinson Watershed Sampling Sites

Wilkinson Lake Subcatchments

10-Foot Elevation Contour

Municipal Boundary

N

0 1,000 2,000

Feet

BARR

WILKINSON LAKE WATERSHED
Vadnais Lake Area Watershed Management Organization

FIGURE 1-2

1.2 Lake Water Quality Goal Setting

MPCA uses MNLEAP modeling to estimate background phosphorus levels for lakes, which provides one basis for goal setting and evaluating how a lake is doing given its ecoregion and morphology. Table 1-1 shows how the MNLEAP predicted phosphorus concentration, which represents an ecoregion-based estimate of water quality for "minimally-impacted" lakes, compares to the ten-year summer average total phosphorus concentrations observed for the respective lakes. The results indicate that the shallow lake standard should be appropriate for East Goose Lake, but is expected to be more difficult to attain for West Goose and Wilkinson Lakes.

Table 1-1 Comparison of MNLEAP Modeling to Observed Lake Water Quality

Lake	Average Summer Total Phosphorus Concentration (µg/L), 2007-2016	MNLEAP Predicted Phosphorus Concentration (µg/L)
East Goose	257	47
West Goose	174	62—83
Wilkinson	140	100

Figures 1-3, 1-4 and 1-5 show how the last ten years of average summer total phosphorus, chlorophyll-a and Secchi disc transparency, respectively, have varied for each of the three lake basins. The first four years of the records shown in each figure represent the data used for the TMDL analyses of the respective lakes. The monitoring data shows that all three lakes are not meeting any of the three shallow lake criteria during the period of record. Figure 1-3 shows that average total phosphorus concentrations were generally better for all three lakes in 2011 and significantly worse in 2016. As a result, these two years became the focus of the updated lake and watershed modeling discussed in Section 3.

Figure 1-3 Summer Average (June-Sept.) Total Phosphorus Concentrations (µg/L) since 2007

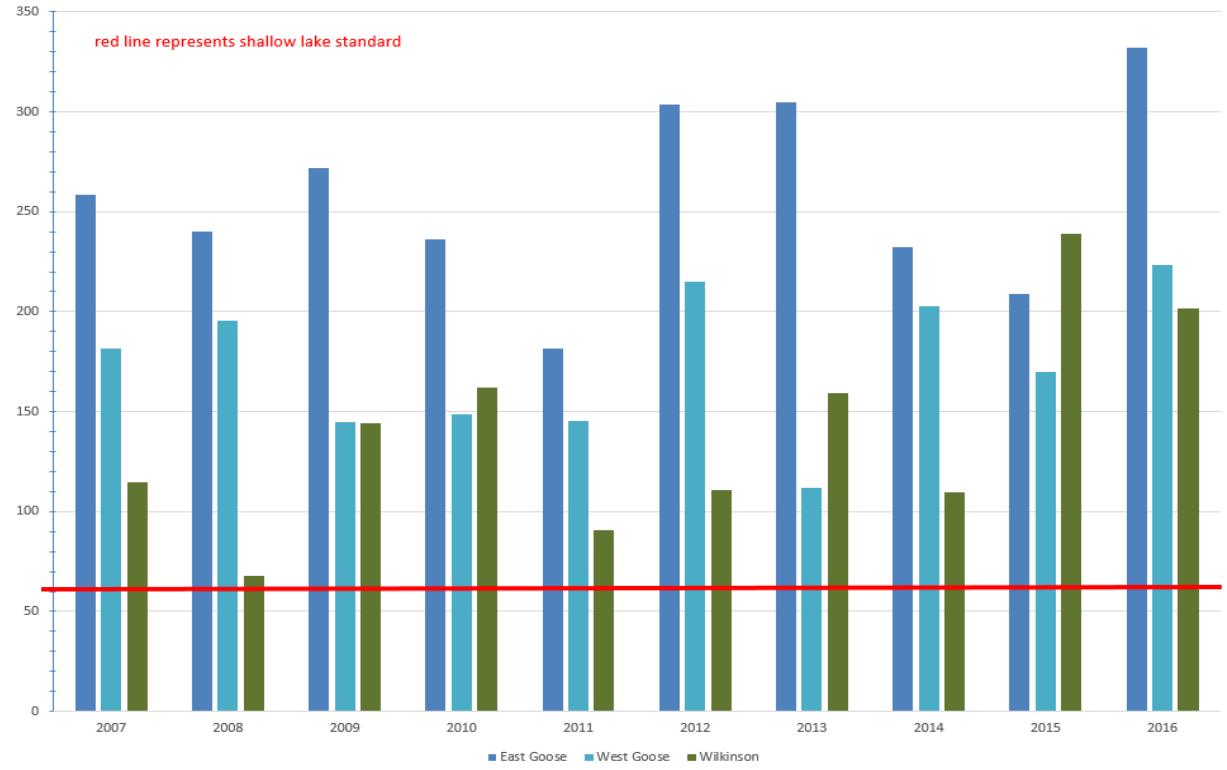


Figure 1-4 Summer Average (June-Sept.) Chlorophyll-a Concentrations (µg/L) since 2007

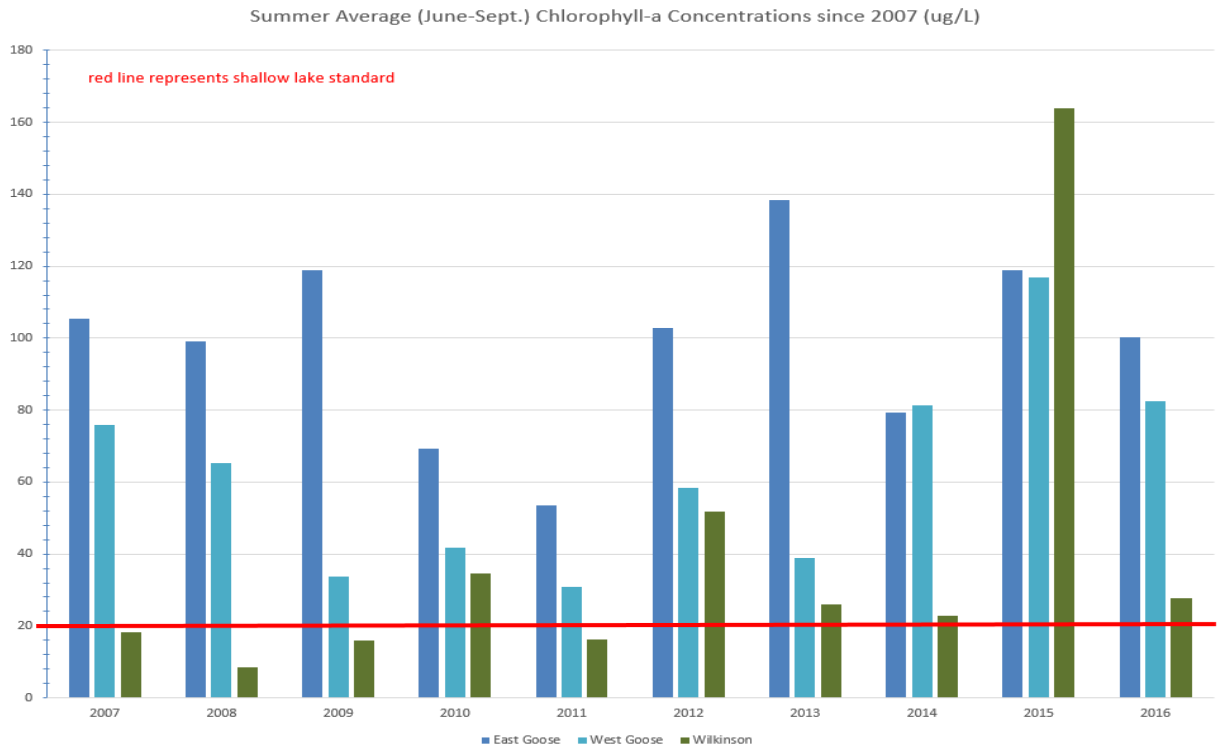
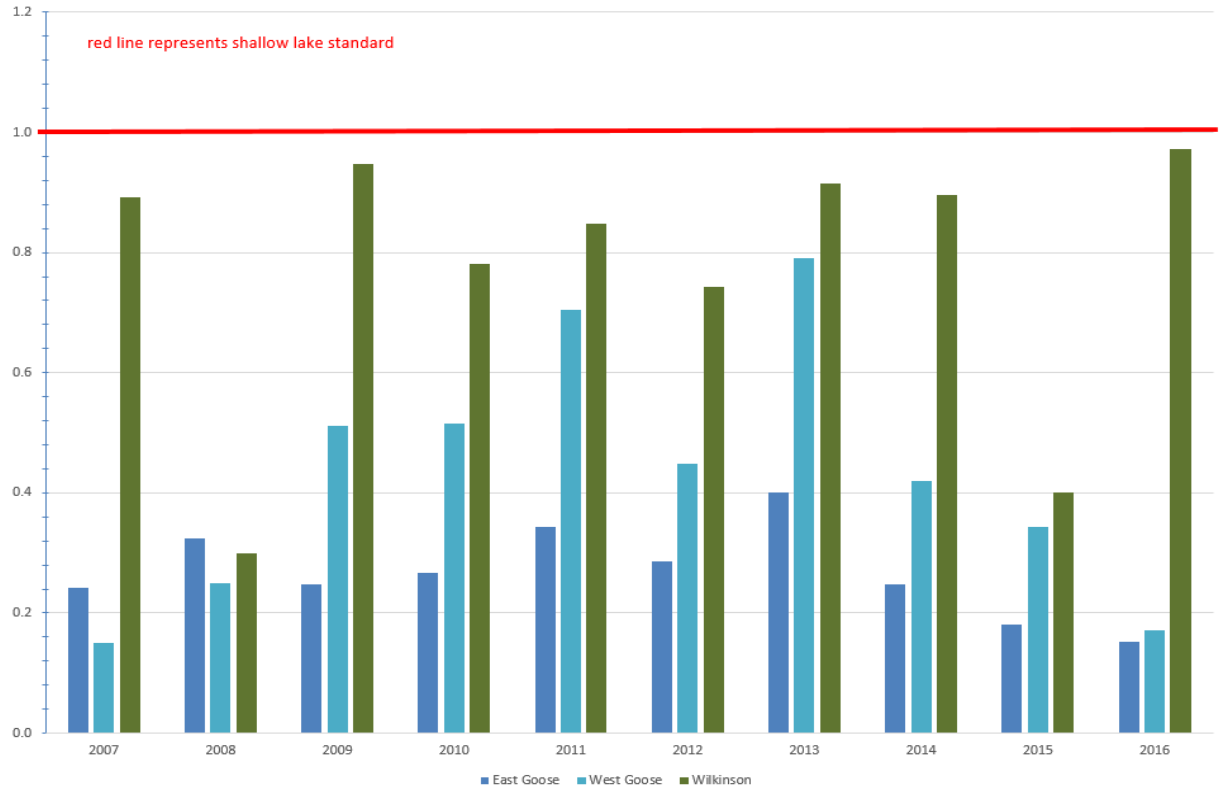


Figure 1-5 Summer Average (June-Sept.) Secchi Disc Transparency (meters) since 2007



2.0 Stakeholder Charrette and Regulatory Summary

Understanding the inner working and prescribing management strategies of lake systems requires use of complex mathematical watershed and lake models. However, the resultant management strategies, although technically supported, are often difficult to convey to the public. To address the issue, a stakeholder engagement process was incorporated into the project. The goal of the stakeholder engagement process was to involve the public, regulatory agencies and VLAWMO staff in the process of identifying and vetting management solutions for Goose Lake and Wilkinson Lake.

On January 10, 2017, the team hosted the Goose Lake and Wilkinson Lake Stakeholder Charrette. The Charrette was attended by members of the public, non-governmental organizations (Midwest Ski Otter Ski Club and North Oaks Homeowners Association), municipal agencies (Cities of North Oaks and White Bear Lake and Ramsey Conservation District), state government (Minnesota Department of Natural Resources and Minnesota Pollution Control Agency) and VLAWMO staff. The attendees convened for a state of the lake presentation for each lake followed by collaborative group discussions.

Collaborative discussions were facilitated around three questions. The questions and information generated are summarized below.

2.1 What kind of recreational support can Goose Lake use?

According to the groups, Goose Lake can support non-motorized activities, waterskiing, pontooning, and fishing for crappies and bass. The groups also acknowledged concerns about the absence of waterfowl and bald eagles, and the presence of curlyleaf pondweed. In addition to the concerns acknowledged, they also thought plant herbicides or harvesting warranted further investigation, as well as the correlation between bullhead removal and improvements in water quality and clarity, and whether water skiing and aquatic plants can coexist in Goose Lake.

2.2 What part do fish and aquatic plants play?

When attendees rotated into this group, they were interested in discerning the difference between invasive and non-invasive plants. It was noted that the lakes have curlyleaf pondweed and Eurasian water milfoil (both invasive plant species) edging into East Goose Lake from the southwest corner. Also, there was concern about the lack of species diversity and how that would affect the ecological functions of the lakes. They were also interested in an evaluation of the following:

- Investigating how fish and plants interact within the lake system and the possibility of using alum treatment on all or part of East Goose Lake;
- Conducting a fish study in Wilkinson Lake; and
- Encouraging recreational use in one of the Goose Lake basins.

2.3 Does the lake's classification appear accurate for attaining water quality standards?

After the state of the lake presentation, the attendees wondered why Wilkinson Lake is considered a shallow lake and not a wetland. The group discussions generated questions for regulatory agencies to address and VLAWMO staff to consider. The questions were:

a. If Wilkinson Lake is a wetland, are the activities planned to address water quality reflective of a wetland or shallow lake?

b. The Department of Natural Resources (DNR) and Minnesota Pollution Control Agency (MPCA) have classifications for public wetlands and public waters. What do these agencies take into consideration when determining the classification of a lake?

c. If the classification for Wilkinson is wrong and it should be a wetland instead of a shallow lake, are the resources (both financial and manpower) being wasted on non-attainable standards?

d. How will modifying the classification affect Wilkinson Lake's eligibility for clean water funding, and other grants?

e. How do climate change and the standard operating procedures of the St. Paul Regional Water Service affect Wilkinson Lake and other lakes?

The questions related to lake classifications (a, b, c and d from above) were discussed with the Board of Water and Soil Resources, the DNR and the MPCA at a follow-up meeting with the state agency staff on February 6, 2017. The remaining question is addressed as part of this study.

During the agency meeting, the DNR stated that the public water/wetland designation is assigned through the legislative process and is a part of Minnesota state law. The public water/wetland designation is not easily modified. The MPCA detailed their role as the agency responsible for assessing a lake's quality and its ability to meet designated standards. Modifying the classification to assign a shallow lake or wetland designation to the public water/wetland through the MPCA is a relatively straightforward process requiring data (maximum depth, littoral area, shoreline vegetation, uses, etc.) supporting the change. After considerable discussion and a qualitative review of the available data on Wilkinson Lake, is was concluded that maintaining the shallow lake classification is best for this system. Wilkinson Lake is in the upper watershed and discharge from it must be relatively clean so as not to adversely affect the water quality of downstream lakes that ultimately feed the water supply. Maintaining the shallow lake classification for Wilkinson Lake will also ensure that eligibility for grant funds will not be affected.

3.0 Water Quality Modeling and Analysis

A key component to performing diagnoses is selecting a rigorous approach to evaluating potential water quality benefits. While the simplified lake and watershed modeling approach used in the 2014 TMDL project was adequate for state and federal agency requirements, it did not account for intra-annual variations in lake water quality was not considered for use in this feasibility analysis as it lumps parameters at an annual time scale, treats lakes as fully mixed in a steady-state with uniform residence time, and does not adequately distinguish internal phosphorus loading sources from watershed sources during the critical conditions for water quality impairment. Based on our review of the available monitoring data and understanding of the purpose of the feasibility study, our approach for evaluating the primary drivers of water quality impairment in each lake adds further clarity, because it is based on updated monitoring data and accounts for intra-annual variations and recent management actions. Differentiating the individual drivers of lake water quality is based on the observed dynamics of each lake to set realistic expectations for future management actions.

The approach for this analysis used existing monitoring data, professional judgment, and modeling to identify the best approach to cost-effectively improve lake water quality. Specific subtasks included:

- Review current and historic water chemistry and biological data. Evaluate long- and short-term water quality trends.
- Review sediment phosphorus data and use it to estimate the internal phosphorus loading potential.
- Using existing watershed modeling, develop an updated lake phosphorus balance that includes phosphorus loads from watershed and in-lake sources and evaluate results to better understand the effect of varying climatic and sensitivity to management changes.
- Analyze fish data to evaluate potential impacts of carp and black bullhead on lake water quality and to determine the impact of water quality dynamics on the fish community.
- Consider the effects that recreational boating are expected to have on lake water quality.
- Integrate data analyses from above to diagnose causes of lake water quality problems, including feedback loops and dynamics between biological measurements and lake water quality observations.
- Evaluate water quality improvement options to identify feasible and cost-effective water quality improvement options for each lake basin.
- Complete an evaluation of feasible water quality improvement options to estimate expected lake water quality changes that could be attained.

3.1 Data Gaps and Limitations of Past Analyses

Lake and watershed modeling, along with the associated GIS mapping, from the TMDL study were obtained and reviewed for use in this study. In addition to the aforementioned limitations of the temporal

scale of the lake water quality modeling, it was determined that the following data gaps and limitations of the past analyses would also need to be addressed to better evaluate the sources of phosphorus during the critical condition and potential improvement options for the respective study lakes:

- The P8 watershed modeling from the TMDL study did not simulate the existing Best Management Practices (BMPs) in the West and East Goose Lake watersheds or natural ponds and wetlands in the Wilkinson Lake watershed. As discussed in the following section, this may have led to overestimated phosphorus loadings for each watershed in the TMDL study.
- The GIS mapping (and associated P8 watershed modeling) from the TMDL study included a significant landlocked area from Gem Lake in the West Goose Lake watershed. This may have also led to overestimated phosphorus loading for this watershed in the TMDL study.
- Figure 1-1 also reflects other small changes that were made to the East Goose Lake watershed divides to better plan for and recommend additional BMPs for future implementation.
- Stormwater monitoring data collected in the Wilkinson Lake watershed since 2011 was obtained and evaluated to better distinguish priority phosphorus source areas that would not otherwise have been determined from the P8 modeling developed for the TMDL study.

3.2 Existing Best Management Practices (BMPs)

Figure 1-1 shows the locations in the East and West Goose Lake watersheds where the city of White Bear Lake and Ramsey County have previously implemented BMPs for stormwater treatment. These existing BMPs include seven ponds, seven rainwater gardens, three swirl separators and five infiltration pipes.

Since it wasn't clear how well these BMPs have been maintained and the watershed mapping did not delineate the direct drainage areas tributary to each practice, the updated P8 watershed modeling did not account for treatment for these BMPs. However, a sensitivity analysis was performed with the lake water quality modeling to evaluate how much a 50 percent reduction in total phosphorus loading would influence the respective lake concentrations.

3.3 East Goose Lake

Updated lake and watershed modeling was developed for this study and optimized to reproduce the observed water quality for each lake during the summer periods of interest. Figure 3-1 shows how the predicted and measured total phosphorus concentrations compare during the summer of 2016 for East Goose Lake. Approximately 85 percent of the phosphorus load was attributed to sediment phosphorus release during this time period. As a result, Figure 3-1 also shows that the predicted phosphorus concentration in East Goose Lake would be much more sensitive to an 80 percent reduction in internal load (similar to what would be expected following an in-lake alum treatment) than it would have been in response to a 50 percent reduction in stormwater loading (similar to what would be expected with widespread BMP implementation) during 2016. It should also be noted that the results of these analyses are based on the same starting phosphorus concentration at the beginning of the summer. Over time, following full-scale BMP implementation or in-lake alum treatment, it is expected that the starting

concentrations would be closer to the shallow lake standard at the beginning of each summer season. Based on the results shown in Figure 3-1, this in turn, should ensure that an in-lake alum treatment would maintain lake water quality at levels that would be consistent with the shallow lake standards.

Figure 3-1 2016 Water Quality Modeling Results for East Goose Lake

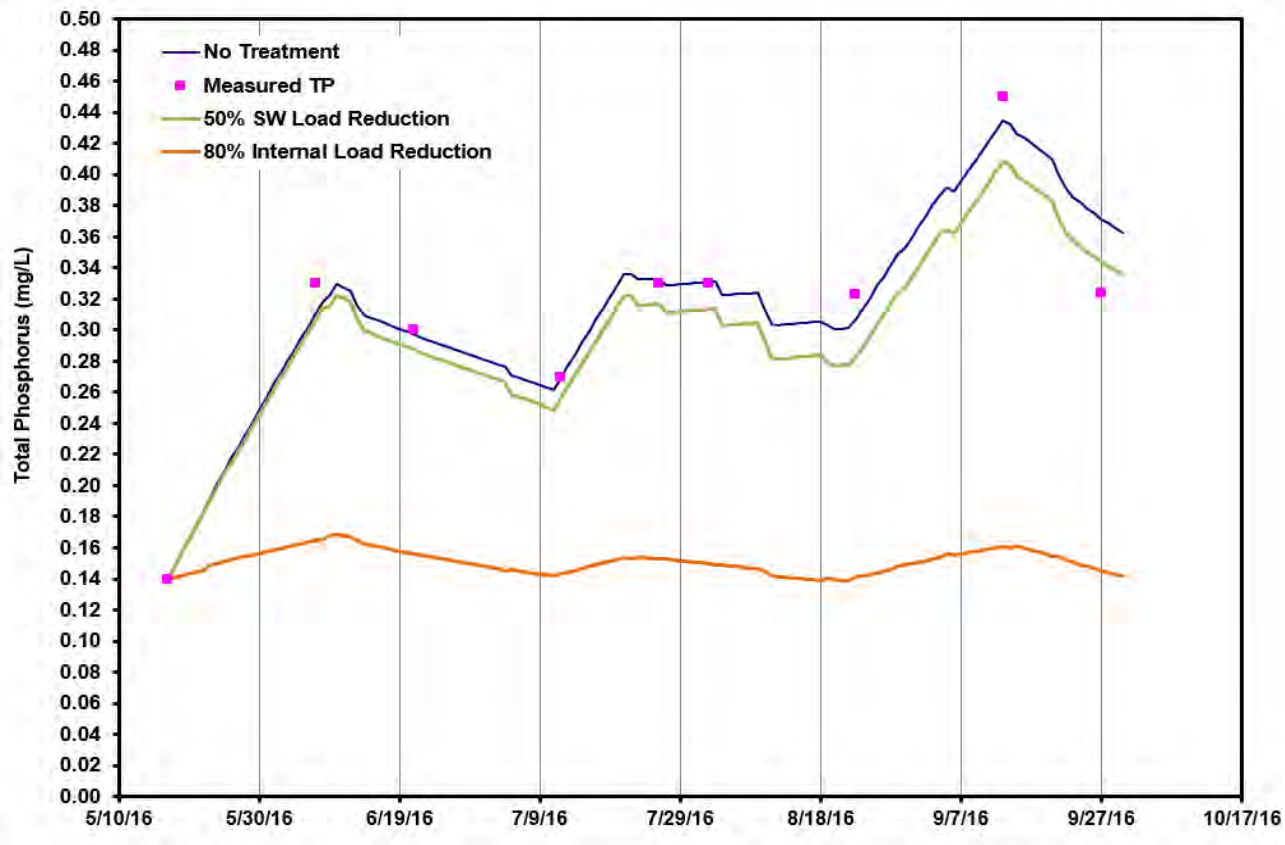
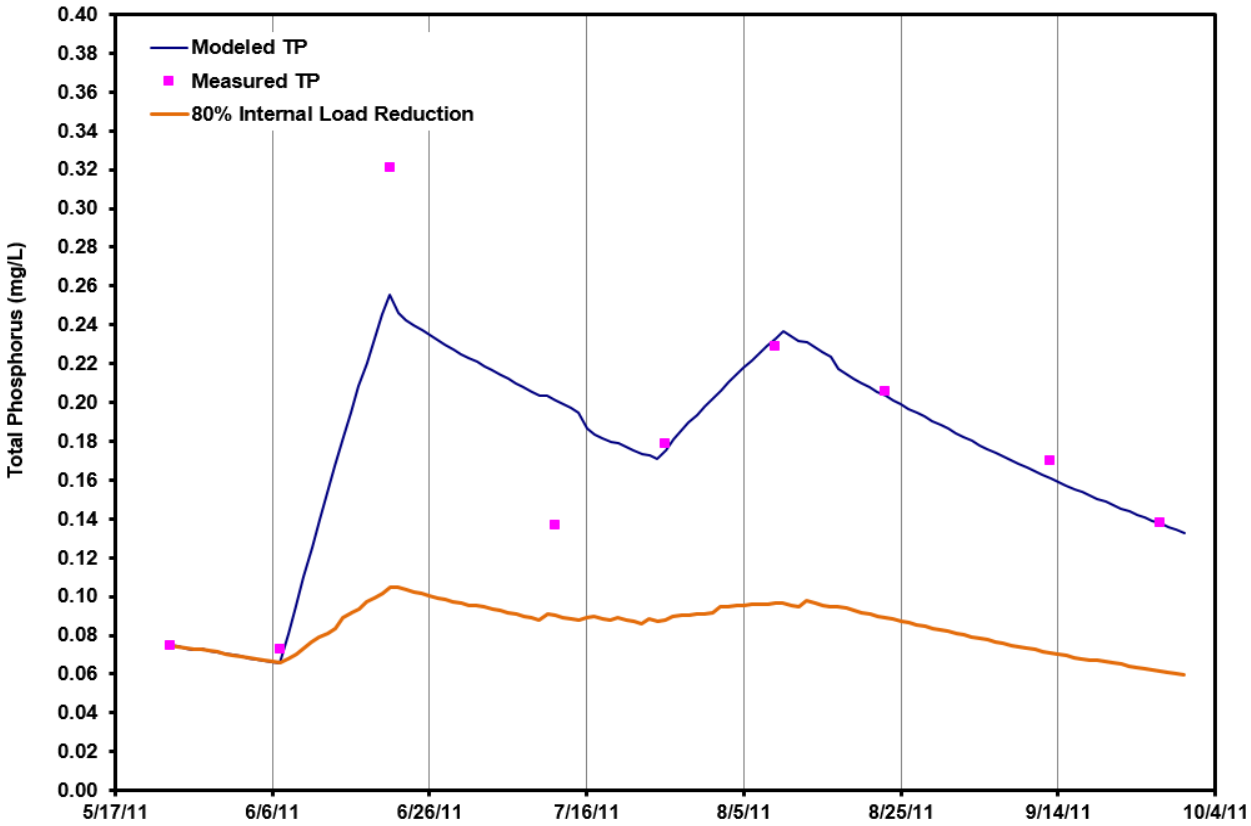


Figure 3-2 shows how the predicted and measured total phosphorus concentrations compare during the summer of 2011 for East Goose Lake. Approximately 80 percent of the phosphorus load was attributed to sediment phosphorus release during this time period. As a result, Figure 3-2 shows that the predicted phosphorus concentration in East Goose Lake would respond well to an 80 percent reduction in internal load (similar to what would be expected following an in-lake alum treatment) during 2011. Again, based on the results shown in Figure 3-2, an in-lake alum treatment would maintain lake water quality at levels that would be consistent with the shallow lake standards.

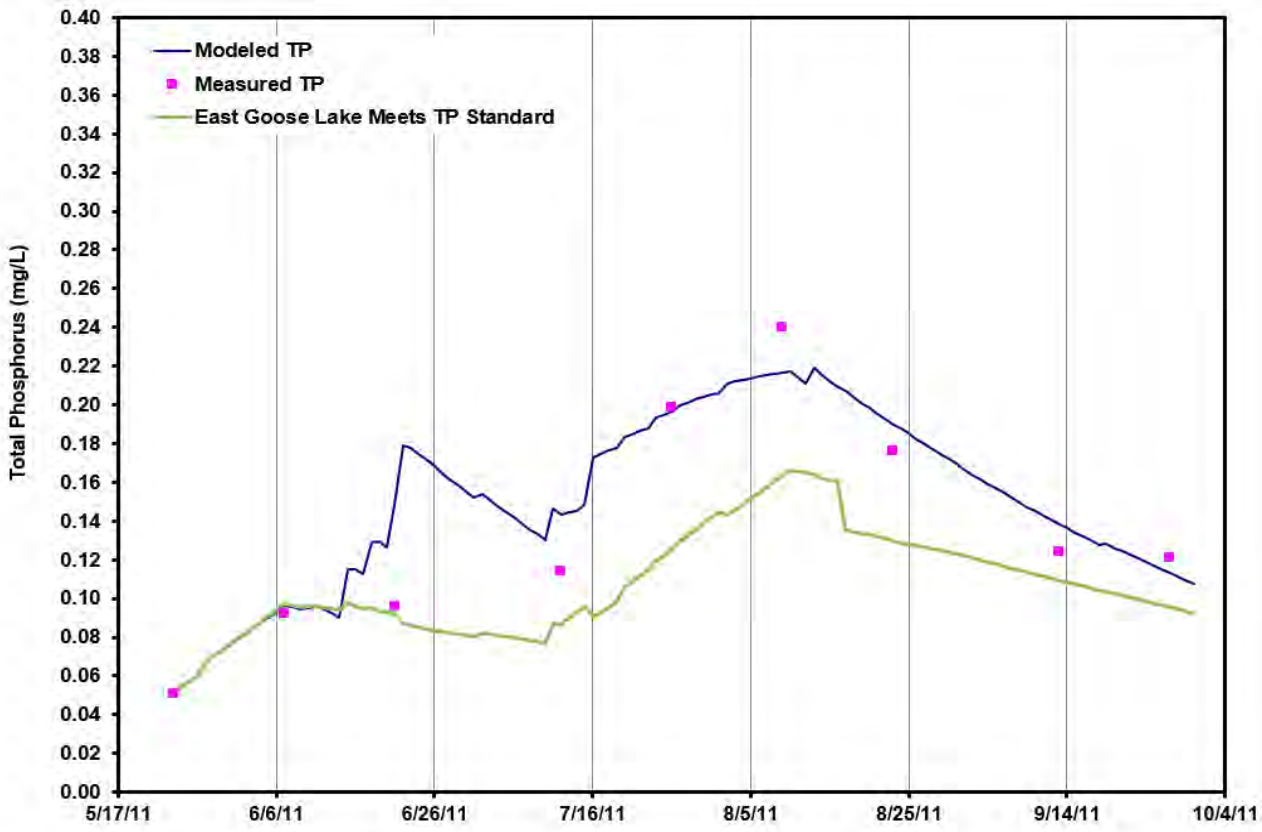
Figure 3-2 2011 Water Quality Modeling Results for East Goose Lake



3.4 West Goose Lake

Figure 3-3 shows how the predicted and measured total phosphorus concentrations compare during the summer of 2011 for West Goose Lake. Approximately 26 percent of the phosphorus load was attributed to sediment phosphorus release, 34 percent can be attributed to stormwater runoff and 39 percent to upstream contributions from East Goose Lake during this time period. As a result, Figure 3-3 also shows that the predicted phosphorus concentration in West Goose Lake is more sensitive to a reduction in incoming phosphorus concentration from East Goose Lake (similar to what would be expected if East Goose Lake had a phosphorus concentration that met the 60 µg/L standard) during 2011. Over time, following an in-lake alum treatment (and to a lesser extent, full-scale BMP implementation), it is expected that the concentrations would be maintained closer to the shallow lake standard throughout the summer season.

Figure 3-3 2011 Water Quality Modeling Results for West Goose Lake



3.5 Wilkinson Lake

Figure 3-4 shows how the predicted and measured total phosphorus concentrations compare during the summer of 2011 for Wilkinson Lake. A majority, if not most, of the phosphorus load can be attributed to watershed runoff during this time period, especially when the results of the average phosphorus concentrations observed during the 2011 watershed monitoring (depicted in Figure 3-5) show that there were a couple of areas contributing high phosphorus concentrations. The priority phosphorus source area north of the lake appears to develop between the Amelia Lake outlet and the Ash St. monitoring station, while the priority phosphorus source area south of the lake can be attributed to flow that originates upstream of the NO Farms monitoring station, but downstream of Birch Lake, Black Lake and the Centerville monitoring station (see Figure 1-2). In both areas, there are ponds/wetlands that may be releasing sediment phosphorus during the summer months. Over time, following full-scale BMP implementation, it is expected that the phosphorus concentrations would be maintained closer to the shallow lake standard throughout the summer season.

Figure 3-4 2011 Water Quality Modeling Results for Wilkinson Lake

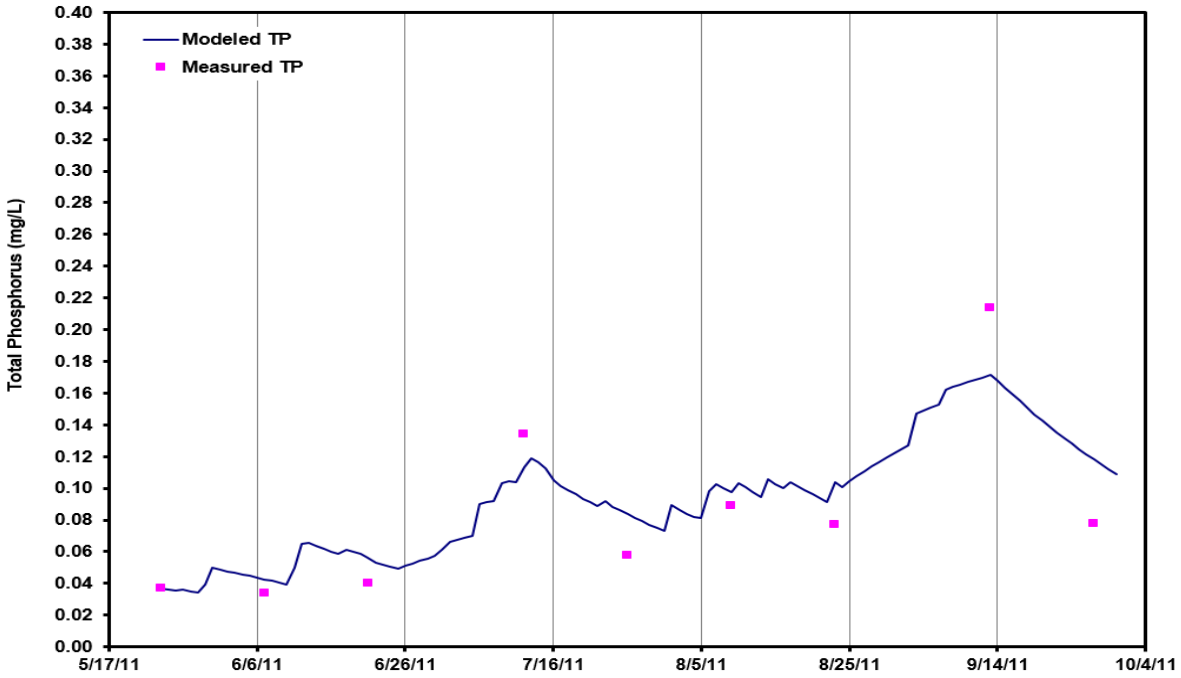
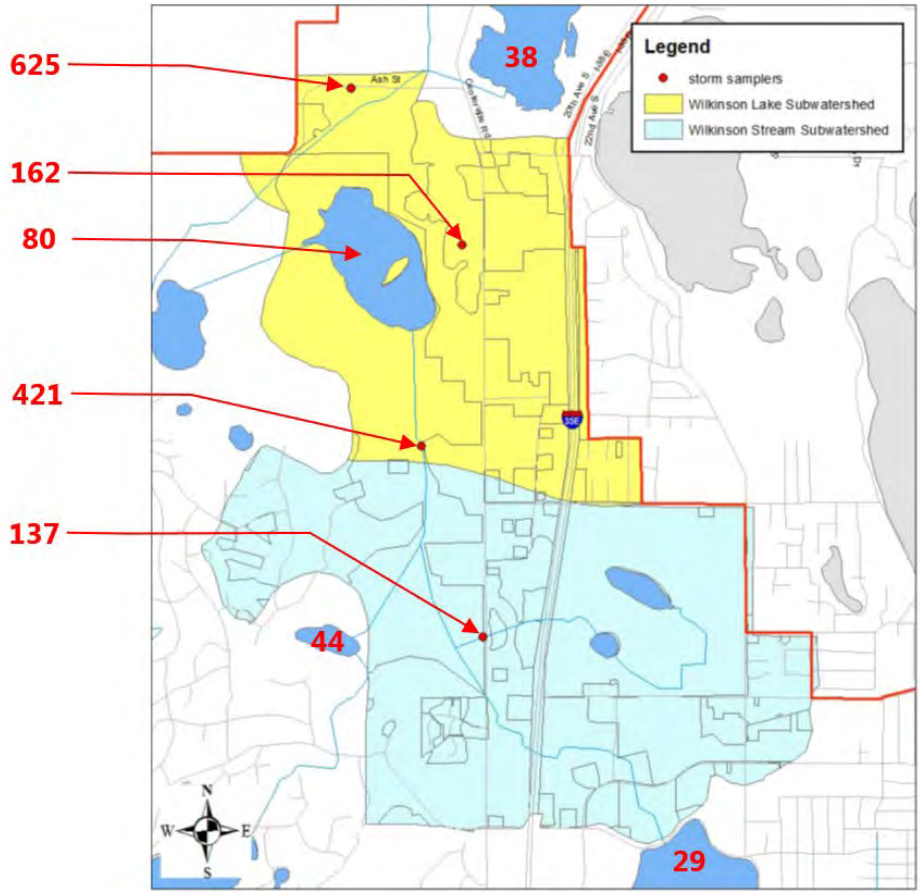


Figure 3-5 Average 2011 Total Phosphorus Concentrations (µg/L)—Wilkinson Lake Watershed



4.0 Recommendations

4.1 East and West Goose Lakes

4.1.1 Potential Improvement Options

As discussed in Section 3.2, and shown in Figure 1-1, there are several existing BMPs in the East and West Goose Lake watershed. An evaluation of the storm sewer conveyances that did not have any existing stormwater treatment revealed that there are approximately five high-priority watershed locations where BMPs should be considered for implementation.

Table 4-1 provides rough estimates of planning level construction costs for the respective BMPs at the recommended BMP locations, based on experience with similar practices in Metro lake watersheds. It is expected that wider-scale implementation of rainwater gardens throughout the watershed would be more cost-effective than the other watershed BMPs shown in Table 4-1, but they may not be feasible and would likely need to be implemented as a part of street reconstruction projects to realize significant cost savings. It is also expected that the alum treatment costs for Options 6 and 7 will be closer to the range shown, which will need to include collection and analysis of additional sediment cores across each lake surface for phosphorus fractionations and dose determinations.

Table 4-1 Summary of Water Quality Improvement Options

Water Quality Improvement Option	Estimated Annual TP Reduction (lbs/yr)	Planning Level Opinion of Potential Costs	Annual Cost per Pound TP Removed ($/lb)
Option 1—Retrofit Lake Bay for Improved Stormwater Treatment	10	$100,000	$10,000
Option 2—Construct Off-Line Filtration System for Low Flows	25	$300,000	$12,000
Option 3—Construct Pond On-Line With 36"-dia. Storm Sewer	25	$300,000	$12,000
Option 4—Infiltration Pipe Upstream of Storm Sewer Outfall to East Goose Lake	5	$50,000	$10,000
Option 5—Infiltration Pipe on School Property	25	$100,000	$4,000
Option 6—Alum Treatment of West Goose Lake	100	$100,000—$130,000	$1,000—$1,300
Option 7—Alum Treatment of East Goose Lake	800	$400,000—$500,000	$500—$625

4.1.2 Recommended BMP Maintenance

In discussing the existing watershed BMPs (see Section 3.2 and Figure 1-1) with White Bear Lake staff it was understood that some of the practices may not have been inspected and/or maintained on a regular basis, or were in-need of more documentation for maintenance activities. For example, the rainwater gardens along County Road F have not been regularly maintained in the past, but it is expected that the County will contract with CCM crews for annual maintenance that should include weeding, trash removal, addition of mulch and supplemental plantings where necessary. Similarly, it is recommended that MS4 and VLAWMO staff coordinate to document inspections and maintenance of all existing watershed BMPs. Depending on existing BMP performance, it can be used to adapt future maintenance activities and inform or change the priority for implementing some of the BMPs identified in Table 4-1. Additionally, depending on the maximum depth, it is suggested that Oak Knoll Pond should be sampled for phosphorus in the pond water during a range of summer flows, as well as phosphorus fractionations from a sediment core sample.

4.1.3 Recommendations for Further Study

4.1.3.1 Spent Lime for Internal Load Control

Barr (Barr Engineering Company, 1992) previously demonstrated the potential use of spent lime sludge from water treatment operations as a bottom sealer to prevent phosphorus release from anoxic sediments collected from Goose Lake. The study used a sediment/water microcosm approach that showed that various small doses of spent lime were capable of completely controlling sediment phosphorus release under anoxic conditions. Since these experiments were conducted, Barr has demonstrated the efficacy of using spent lime to treat phosphorus and solids in stormwater runoff, but in-lake treatment for sediment phosphorus control has not been attempted outside of the lab setting. Since a significant portion of the cost of in-lake alum treatment is associated with the chemical costs, it is worth considering alternatives such as spent lime, which is a byproduct of water treatment operations that currently incurs significant expense for disposal by local utilities.

It is recommended that VLAWMO initiate a study, in cooperation with Barr, to evaluate pilot-scale implementation of this treatment approach as well as development of the conceptual design and potential cost-effectiveness for full-scale implementation of in-lake treatment for the Goose Lake basins (and/or any other watershed basins that are currently experiencing high levels of sediment phosphorus release). The recommended study objectives would include assessments of spent lime availability and transportation costs, savings in comparison with current disposal methods, the equipment needs and costs for surface water applications including both filter cake and slurry forms of spent lime, and assessments of sediment and surface water quality improvements as well as the overall life-cycle cost-effectiveness for comparison with other in-lake treatment options. It is expected that the cost for this pilot-scale study could range from $15,000 to $30,000, depending on the treatment extent and monitoring requirements.

4.1.3.2 Lake Vegetation Management Plan (LVMP)

A lake vegetation management plan (LVMP) is a document the Minnesota Department of Natural Resources (DNR) develops with public input to address aquatic plant issues on a lake. The LVMP is intended to balance riparian property owner's interest in the use of shoreland and access to the lake with preservation of aquatic plants, which is important to the lake's ecological health. It is recommended that VLAWMO work with the DNR and the public to develop a LVMP for both East and West Goose Lakes that will prescribe the permitted aquatic plant management actions (mechanical and/or herbicides) for a five-year period, including controls for invasive plants and restoration of lake shore habitat. VLAWMO should also pass along Ramsey Conservation District's plant survey and inquire with DNR about whether the survey information can be used as the control for future plant management actions.

4.2 Wilkinson Lake

As discussed in Section 3.5, there are two separate areas (upstream of both the Ash St. and NO Farms monitoring stations) in the Wilkinson Lake watershed that are contributing significantly higher total phosphorus concentrations/loadings to the lake. In both areas, there are ponds/wetlands that may be releasing sediment phosphorus during the summer months. As a result, it is recommended that VLAWMO conduct longitudinal monitoring over a range of flows during the summer months that would include collection of grab samples analyzed for total phosphorus, soluble reactive phosphorus, nitrate, ammonia and total suspended solids, along with dissolved oxygen, temperature and flow measurements during each sampling event.

If the next fishery survey indicates that Wilkinson Lake contains a significant rough fish population, then the efficacy of the carp barrier at the lake outlet and/or passage from upstream lakes should be re-evaluated for recruitment.

5.0 References

Barr Engineering Company. 1992. The Effects of Spent-Lime Sludge Additions on the Anoxic Sediment Phosphorus Release Rates of Goose Lake, Ramsey County, Minnesota. Prepared for St. Paul Water Utility.

EST 1983
VLAWMO
Vadnais Lake Area
Water Management Organization

800 County Road E East, Vadnais Heights, MN 55127
www.vlawmo.org

Date: June 22, 2017

To: the Board of Directors

From: Stephanie McNamara, Administrator

Re: V.A. 2018 Budget for consideration

The proposed budget 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 storm sewer fees. SSU fees for single family residential properties in 2018 will be about $2.57 higher annually than this year or about $39.50. The SSU fees are estimated at this time. Final numbers will be available in the August Board materials using updated parcel data and the new 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 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, 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.

		VLAWMO BUDGET 2017 EXPENSE	2016 budget with fund balance	Actual 2016	2017	2018 Draft	% change	Water Plan	
3.1		Operations & Administration	$434,182	$447,387	$459,740	$481,500	4.5%	$623,400	For all expense except the subwatershed expenses
	3.110	Office	$23,375	$22,000	$23,740	$23,700			
	3.120	Information systems	$25,417	$19,890	$19,500	$21,500			
	3.130	Insurance	$5,200	$4,370	$5,200	$5,200			
	3.141	Consulting -Audit	$6,100	$6,780	$6,800	$6,400			
	3.142	Consulting - Bookkeeping	$1,500	$2,148	$1,500	$2,000			
	3.143	Consulting - Legal	$11,000	$3,607	$3,000	$3,000			
	3.150	Storm Sewer Utility	$16,000	$12,078	$16,000	$13,500			
	3.160	Training - staff, board,TEC	$4,000	$1,781	$4,000	$4,000			
	3.170	Misc & contingency	$11,000	$3,236	$7,000	$5,200			
	3.191	Employee payroll	$270,340	$298,211	$303,000	$314,000	3.6%		
	3.192	Employee liability	$60,250	$62,343	$70,000	$83,000	18.6%	Health Ins inc 4%	
3.2		Monitoring & Studies	$33,200	$20,617	$25,500	$25,000	-2%	$500	
	3.210	Lake & creek program lab analysis	$28,500	$18,751	$23,000	$22,500			
	3.220	Equipment	$4,700	$1,866	$2,500	$2,500			
3.3		Education & Outreach	$36,500	$13,292	$34,000	$24,000	-42%	$10,000	
	3.310	Public Education	$8,250	$977	$7,000	$7,000			
	3.320	Outreach and marketing	$8,250	$4,315	$7,000	$7,000			
	3.330	Community Blue education grant	$20,000	$8,000	$20,000	$10,000		$5,000	
3.4		Capital Improvement Projects & Programs	$266,700	$186,624	$125,900	$183,900	46%		
		Subwatershed Activity						$379,900	
	3.410	Gem Lake subwatershed			$0				
	3.420	Lambert Creek subwatershed	$52,000	$111,358	$1,000	$22,000		$10,000	$20K grant funding & $1k pet waste mang. Removed
	3.425	Goose Lake subwatershed	$32,500	$19,096	$14,900	$40,000		$180,000	$40k VL portion of larger project, assumes grant/partner/spec. tax dist funding
	3.430	Birch Lake subwatershed		$0	$5,700	$22,200		$0	$21k toward 4 & Otter project
	3.440	Gilfillan Black Tamarack Wilkinson Amelia subwatershed		$0	$17,600	$30,000		$37,000	Rolls $24k NO SW project into Wilkinson ($50k) - $37= $30k; no fish mang -$3k
	3.450	Pleasant Charley Deep subwatershed	$23,000		$5,700	$5,700		$12,000	Cuts Deep Lk feasibility to 2019 -$12k; keeps fish & veg survey on Deep
	3.460	Sucker Vadnais subwatershed	$35,000		$0	$0			
	3.48	Programs							
	3.481	Landscape 1 - cost-share	$21,000	$14,270	$24,000	$24,000		$0	
	3.482	Landscape 2	$30,000	$20,000	$30,000	$30,000		$0	
	3.483	Project research and feasibility - watershed wide	$51,200	$18,676	$17,000	$5,000		$15,000	
	3.484	Maintenance & operations	$22,000	$3,224	$10,000	$5,000			
3.5		Regulatory	0	$0	$5,000	$2,000			
	3.510	Engineering plan review	$0	$0	$5,000	$2,000			
		Total budget	$770,582	$667,920	$650,140	$716,400			

		INCOME						
5.1			2016	2016 Actual	approved 2017	Dr. 2018	$44,960	difference in SSU total
	5.11	Storm Sewer Utility	$503,350	$498,792	$645,440	$690,400	6.97%	
	5.12	Fees for Service	$500	$500	$500	$500	$36.84	2017 SSU for single family residential
	5.13	Interest	$150	$577	$200	$500	$39.41	2018. SSU
	5.14	Misc. income - WCA admin grant	$5,000	$5,848	$4,000	$5,000	$2.57	difference
	5.15	Other funding sources - grants, donations	$0		$0	$20,000	$696,400	w/o grant
	5.16	Transfer from reserves	$190,000	$50,000	$0	$0		
		Total	699000	$555,717	$650,140	$716,400	6.6%	increase

				proposed	proposed	proposed
year	2014	2015	2016	2017	2018	2019
Operations	$421,151	$470,700	$549,955	$524,240	$420,900	$433,500
CIP	$140,000	$140,000	$145,000	$525,900	$582,400	$590,800
Total	**$561,151**	**$610,700**	**$694,955**	$1,050,140	$1,003,300	$1,024,300
			LCCMR gra	$400,000	$220,000	$280,000
				$650,140	$70,000	$50,000
					$713,300	**$694,300**
		8.8%	12.1%	-6.4%	9.7%	-2.6%

CIP for 2017 - 2019

These are some big ticket items for the next three years that are either grant funded, could be grant funded or may need significant partner contributions. 2017 has $400k of the $500k grant, with the other $100k spread over the next 2 years. 2018 the big ticket is a proposed nutrient reduction project in Goose Lake ($220K). Certainly VLAWMO should budget something, but also secure partnerships and pursue grants. 2019 the big item is a stream restoration project on Lambert creek. This might also address some flooding issues along the creek - again grants & financial partners may be part of the picture. Both 2018 & 2019 have $50k each for a nutrient reduction project in Wilkinson; costs, partners, grants TBD.

Increases in 2015 was fueled by inflation and the payroll market adjustment

Increases in 2016 reflect IT service change and one time costs associated with the Water Plan.

Income	**2013**	**2014**	**2015**	**2016**	**2017 (may)**	**Average**
Service Fees	0	100	800	500	0	280
Interest	92	218	209	550	426	299
Misc & WCA grant	7505	7251	3604	5848	2337	5309
Reimbursed expenses	1935	810	165	1253	436	919.8

Footnotes for the 2018 VLAWMO Budget

1. **3.110** - ***$23,700 Office***. The rental expenses are anticipated to increase under a lease with the City of Vadnais Heights. Details are in the table below. Rent includes the main office, 4 cubicles, storage space and access to conference rooms. Telephone, internet and office machine overhead is $3,100 for 2014. Postage, copies and supplies are estimated.

Office expense	2016 amended	2017 amended	2018 proposed	2019	2020
Rent	17400	17,400	17,640	17880	18,120
Tel /Internet/ machine use	2820	2820	3000	3180	3,360
Postage	550 *	600 *	600 *	600 *	620 *
Copies	450 *	500 *	500 *	550	550
Supplies	1950 *	2000 *	2000 *	2050	2050
total	$23,170	$23,320 *	$23,740 *	$24,260	$24,700 *

*estimated

2. **3.12 - $21,500**. **Information systems** – This covers the critical IT annual maintenance costs:
    a. Roseville – Metro INET 14% or $50/mo inc.$13,173
    b. website hosting, support & email (HDR) $2000,
    c. Google apps for government $250
    d. GIS web hosting & update to the GIS mapping system (Houston), $1300,
    e. Adobe software for 2 ($53 + 22) * 12 = $900
    f. ESRI ArcView license renewal ($700) & GIS User group dues $250.
    g. Software updates: $500
    h. Hardware updates (1.33 laptops): $2000
3. **3.13 - $5200. Insurance**. This is the same as last year. Worker's compensation insurance tracks with payroll costs.
4. **3.141**- **$6400**. **Consulting - Audit**. This amount reflects the total in the second year of our contract with Clifton Allen Larson.
5. **3.142 $2000 Consulting - Bookkeeping**. We have taken bookkeeping in house with the loss of our new bookkeeper. At this point we are still determining how cost-effective this will be. The line item will allow for the hire of a new bookkeeper for 2018 if this proves most efficient.
6. **3.143 $3000 Consulting - Legal** This item is the same as 2017.
7. **3.150 $13,500 Storm Sewer Utility**. This budget item provides consultant assistance to translate our annual budget into SSU fees for each of 11,000+ parcels within VLAWMO and assistance certifying those parcels to two Counties. This assistance is critical to the SSU, the main source of VLAWMO funding. Consulting fees vary slightly from year to year depending on property divisions and other changes during the year. Property roll changes later in the calendar year tend to be more expensive to us as it requires reapportioning already determined or certified fees. Certification payments to the counties are about $4500.

8. **3.160 $4,000 Training: staff, Board, TEC**. Five staff and some volunteers taking advantage of occasional excellent workshops. $1000 is included the training budget to provide the beginning of the educational assistance fund consistent with the policy adopted by the Board to provide up to $1000 annually to staff going back to school. So far staff has not taken advantage of this but there is interest. The $1000 if not used is intended to roll over in case more than one at a time is taking advanced training or coursework.
9. **3.170 Misc. & contingency $5200** This item was reduced from 2017 based on 2016 expenditures. Mileage at federal rates and other expenses are paid with this budget item. Our contingency budget represents less than 1.0% of the total budget.
10. **3.191 & 3.092. Administration or staff payroll: $314,000 + $83,000 = $397,000 (**employer liability – FICA, PER, health stipend**)** is proposed for 2017 which allows for up to a 3% cost-of-living increase. Background: 2016 is the first full year of five full time employees. This was not budgeted in 2016 which resulted in about $30,000 drawn from reserves. After functioning at 4 staff members for the first 4 months of 2016 the fifth staff member started in as an intern May. This allowed for some 2016 savings. The 2017 budget was already approved by the time the Board considered health insurance for employees. Changes in the health insurance market which have not been reflected in the health benefit stipend (remained @ $4700 for 8 years) have moved the Board to authorize health insurance & an Health Savings Account in 2017. It is anticipated that the health insurance will cause our actual expenditures to be about $8000 more than budgeted. The 2018 budget reflects 3% average COLA increase for payroll and a $15.7% increase due to health insurance premiums. Paying staff is our biggest single expense, but critical to all other programs. Some other changes on the horizon may include a step increase for a couple of the staff, possible need to change the health care stipend and the over-time exemption for professional employees. Again: VLAWMO benefits include PTO for vacation and sick leave (based on length of service), paid holidays, health insurance & HSA which is the same for the last 7 years, PERA (required public pension) and short term disability.
11. **3.21. $22,500 Lake and creek lab analysis** . Actual costs have rose in 2016 due to additional testing. This total reduces the budget $1000 in line with actual costs while maintaining a buffer for rate increases. VLAWMO still partners with Ramsey County on chloride testing. VLAWMO is partnering with the St. Paul Regional Water Service enumeration bacteria sampling and analysis. The bacteria testing costs are reflected in the project costs rather than here in the general program expenses SPRWS does the analysis and VLAWMO purchases the testing media. DNA analysis is done by Weston labs in California and is paid under the CIP.
12. **3.22. $2,500 Equipment** We anticipate carrying over canoe replacement funds from 2017 to 2018. Life jackets need replacement. Additional automated monitoring equipment has also been under discussion although is not reflected in the 2017 budget. This pays for bacteria processing supplies, ice & dry ice for transport and other supplies.

13. **3.310 Public Education - $7,000**. This will provide materials and books for working with schools, community organizations and our municipal partners. It pays dues to partner organizations such as NEMO, Blue Thumb, MN Dragonfly and Watershed Partners. This is for expenses associated with the Annual Report and subsidizing books for workshops. The same as last year
14. **3.320 $7000 Outreach and marketing** This portion of the budget would fund brochures, community event materials and non- project related signage. Facebook ads, constant contact for e-news distribution, brochures, branding material & swag are included.
15. **3.330 $10,000 Community Blue Education grant.** Community Blue. This will be the 3rd year of the education grant program that partners with community groups within the watershed to promote water resource stewardship. The amount available is set in the budget rather than the policy guidance. While interest has been increasing in the program the amount available in 2018 has been reduced to Interest has been increasing in this grant program. $10,000 was used in 2016 in Rice Lake. About $700 funded portion of the Water Symposium in White Bear.
16. **3.410 $0 Gem Lake Subwatershed. $**0 for 2018. The Water Plan describes expenses in other years.
17. **3.320 $22,000 Lambert Creek Subwatershed.**. The majority of the funding for the Whitaker Treatment wetlands will come from the LCCMR grant. Monitoring by both the University of MN and VLAWMO will start in 2018. The remaining $100,000 will be budgeted in 2018 to cover the monitoring costs for 3 years and the report writing.
18. **3.425 $40,000 Goose Lake Subwatershed.** This is anticipated to be match funds with partners and perhaps grants to work on a capital project.
19. **3.430 $22,200 Birch Lake Subwatershed**. This is match money for a potential project on 4th and Otter Lake Road. The rest is for other collaborative work with BLID.
20. **3.440 $30,000 Gilfillan Black Tamarack Wilkinson Amelia Subwatershed**. This combines all North Oaks work for the year to one project or program on Wilkinson.
21. **3.450 $5,700 Pleasant Charley Subwatershed.** Special monitoring.
22. **3.460 $0 Sucker Vadnais Subwatershed**. Regular monitoring. No projects in 2017.
23. **3.381 $24,000. Landscape 1 (cost-share)**. The budget item has increased slightly in 2017 reflecting policy changes as well as popularity of a program that puts the funds directly back into BMP's in the ground. The Board and TEC have seen this as a good opportunity to put good stormwater practices directly back into the watershed and foster stewardship and education.
24. **3.382 $30,000 Landscape 2.** The Landscape Level 2 grant program as the funding source for those larger (greater than $10,000) projects brought to VLAWMO by community partners who otherwise could not implement their best management practice.
25. **3.383 $5,000 Project research and feasibility – watershed wide.** This provides technical and engineering assistance or special monitoring efforts for projects that do not target one specific subwatershed. The main chain from Charley to Vadnais

remains a concern. This could provide seed money to partner on an effort. This replaces the engineering and technical budget items from the 2016 budget. This could provide a phased H & H study (hydraulic & hydrology) that would bring our understanding of the watershed to a new level.

26. **3.484 $5,000 Maintenance and operations (Facilities maintenance).** This was reduced from 2017. This is based on actual expenditures. The Board has been rolling over unspent funds at year end so the available balance has so far met the 3% increase goal identified in the Water Plan. As VLAWMO installs more projects, out maintenance liability also increases.
27. **3.510 $2000 Plan reviews – engineering assistance**. This is a new category established as a core activity under the new plan. Much of the work is done in-house by staff. This would provide assistance of a water resources or civil engineer.

28. **INCOME. 5.51 $689,300 Storm Sewer Utility fees.** Last year was: $645,440. This is an increase of $6.8%.

29. **5.12 Service fees ($500)** is the same since 2013 although this income varies from year to year.
30. **5.13 Interest ($200)** has also been increased to better reflect current interest rates.
31. **5.14 WCA subgrant & misc. income ($4000)** – reduced to reflect actual income.
32. **5.15 $400,000 Other funding sources – grants, donations.** This large grant will be used to fund the Whitaker treatment wetlands project. Another $100k will be budgeted in 2018 to complete the 3-year monitoring and the report writing.
33. **5.16 Transfer from reserves and grants: $0 - $70,000** was budgeted for transfer from the VLAWMO General Fund to fund the 2016 Budget. At this point, I anticipate we will need to tap about $50,000 to $60,000 instead. This could allow for some use of reserves in 2017 to buffer increases to the 2017 Storm Sewer Utility fees. This will bring the available fund balance down as directed by the Board. But VLAWMO will need to continue to increase its base revenue if the current level of activity is to be sustained. VLAWMO is becoming more & more effective, more known, but it does cost money. Significant reimbursement of projects by grants and partnerships helped offset 2014 expenses. Partnerships are leveraging significantly more funding and in-kind work.

Ramsey Conservation District PSA 2016-2017

1. Cost share - $4000 total, $2,000 each year. To come from 6.4.4 Financial incentives (6.3.4) in 2016 and Landscape I (3.381) in 2017.
2. Technical & design assistance - $10,000, or $5,000 for 2016 and about $3800 for 2017. Funding will come from Engineering consulting (6.118) in 2016 and Research and feasibility (3.383) in 2017.
3. Subwatershed work on Charley and Pleasant (3.35) $1200. Charley vegetation/ bathymetric SLMP study.

800 County Road E East, Vadnais Heights, MN 55127
www.vlawmo.org

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 28th day of June, 2017 at 7:00 o'clock p.m.

The following members were present:
Jones, Lindner, Long, Nyblom, Prudhon, Rafferty

The following members were absent:

Resolution 01-2017 was moved by Director _____ and seconded by Director _____:

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 $715,900.

Therefore be it resolved that the 2018 Budget, dated 6-28-2017 is approved.

Vote:
Aye:
Nay:
Abstain:

_____ _____
Dan Jones, Chair Date

Attest:

_____ _____
Stephanie McNamara, Administrator Date

EST 1983
VLAWMO
Vadnais Lake Area
Water Management Organization

800 County Road E East, Vadnais Heights, MN 55127
www.vlawmo.org

Date: June 22, 2017

To: the Board of Directors

From: Brian Corcoran, Stephanie McNamara

Re: V.D. Whitaker Treatment Wetlands – construction contract

On April 26, 2017 the Board gave authorization to proceed with the RFP for the Whitaker Treatment Wetlands construction and to have staff bring a contractor recommendation to the June 28, 2017 Board meeting. Six bids were received for the project ranging from $217,250 to $354,000. The engineer's estimate of probable cost was $247,000.

Staff asked our engineer's, 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 Belair Builders, Inc. as the Whitaker Treatment Wetlands construction contractor.

Also attached is the *Notice of Award for Belair Builders, Inc.*

Memorandum

BURNS McDONNELL

Date: June 14, 2017

To: Brian Corcoran, Water Resources Manager, VLAWMO

From: Tonya Koller, PE and Kari Andrist, EIT, Burns & McDonnell

Subject: VLAWMO Treatment Wetland Pilot Project Contract Award

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) has conducted an evaluation of bids for the VLAWMO Treatment Wetland Pilot Project. The Bid Tabulation is included as Attachment A. As shown in this tabulation, Belair Builders, Inc. (Belair) is the apparent lowest qualified bidder.

After further discussions, Burns & McDonnell has confirmed that Belair has a reasonable understanding of the project as defined in the Plans and Specification. Furthermore, Belair has expressed confidence in their ability to perform the project for the specified bid price.

Burns & McDonnell team members have worked with Belair on a number of projects in the past. Based on the success of these projects and initial discussions regarding the VLAWMO Treatment Wetland Pilot Project, Burns & McDonnell recommends Belair be selected to construct this project.

KLA

Attachment:

Attachment A – VLAWMO Bid Tabulation

Project Title: VLAWMO Treatment Wetland Pilot Project
Client: VLAWMO
Location: White Bear Lake, MN
Contract Name: Treatment Wetland Pilot Project

Date: 6/14/2017
Project No.: 97161
Designed By: Brian Weis

Description: Attachement A - Bid Tabulation

BIDDERS / BID ITEM DESCRIPTION	Belair Builders, Inc.	Veit & Company, Inc.	Blackstone Contractors, LLC	Peterson Companies	Rachel Contracting	Urban Companies	Engineer's Estimate of Probable Cost
Field Engineering	$2,450.00	$4,500.00	$6,500.00	$3,000.00	$5,000.00	$5,000.00	
Mobilization	$4,500.00	$4,173.00	$15,000.00	$34,193.82	$31,000.00	$13,000.00	
Temporary Erosion & Sediment Control	$4,300.00	$2,400.00	$4,250.00	$10,646.50	$8,000.00	$15,000.00	
Site Preparation	$9,550.00	$3,300.00	$3,260.00	$4,608.00	$1,000.00	$20,000.00	
Common Excavation	$5,850.00	$9,700.00	$12,500.00	$6,395.00	$12,000.00	$83,000.00	
Geomembrane Liner	$25,800.00	$26,000.00	$34,500.00	$30,292.00	$36,000.00	$35,000.00	
Wetland Media (aggregates, sands, engineered soil, and topsoil)	$28,350.00	$44,300.00	$38,500.00	$64,569.00	$60,000.00	$55,000.00	
Infiltration Gallery	$1,550.00	$1,800.00	$4,850.00	$4,087.86	$4,500.00	$20,000.00	
Piping and Appurtenances	$50,850.00	$41,000.00	$33,000.00	$38,672.25	$66,000.00	$20,000.00	
Pump and Solar Array/Batteries	$34,450.00	$35,900.00	$31,000.00	$15,913.57	$33,200.00	$20,000.00	
Pump Shed and Foundation	$8,750.00	$14,150.00	$9,250.00	$7,328.00	$6,000.00	$5,000.00	
Planting and Seeding	$29,650.00	$29,130.00	$23,257.50	$26,444.00	$25,000.00	$40,000.00	
Monitoring System	$1,200.00	$1,800.00	$6,600.00	$10,000.00	$2,000.00	$10,000.00	
Surveying	$7,600.00	$4,700.00	$10,000.00	$8,090.00	$15,000.00	$8,000.00	
System Commissioning	$2,400.00	$4,400.00	$7,500.00	$5,760.00	$6,000.00	$5,000.00	
Total Base Bid	**$217,250.00**	**$227,253.00**	**$239,967.50**	**$270,000.00**	**$310,700.00**	**$354,000.00**	**$247,000.00**

DOCUMENT 005100 – NOTICE OF AWARD

To: Belair Builders, Inc. dba Belair Sitework Services (Bidder)
2200 Old Highway 8 NW
New Brighton, MN 55112

Project Name: Treatment Wetland Pilot Project
Owner: Vadnais Lakes Area Water Management Organization (VLAWMO)

You are notified that your Bid, dated June 13, 2017 for the above Contract has been considered. You are the apparent successful Bidder and are being awarded the Contract for the above stated Project and which is described as follows:
The construction of Treatment Wetland Pilot Project at Columbia Park located in White Bear Township, Minnesota for the Vadnais Lake Area Water Management Organization (VLAWMO or Owner). Construction consists of excavation; geomembrane installation; piping, aggregate, engineered soil, and topsoil installation; solar pump and array installation; and landscaping and planting.

The Contract Price of your Contract is two hundred and seventeen thousand two hundred and fifty dollars ($217,250.00).

The Contract Unit Prices of your Contract will be as stated in your Bid Form.

You must comply with the following conditions precedent within 10 days of the date of this Notice of Award, that is by _____, 2017.

1. Deliver to the Owner three fully executed counterparts of the Contract Documents.
2. Deliver with the executed Agreement the Contract security (Bonds) as specified in the Instructions to Bidders, General Conditions, and Supplementary Conditions as applicable.

Failure to comply with these conditions within the time specified will entitle Owner to consider your Bid in default, to annul this Notice of Award, and to declare your Bid security forfeited.

Within 10 days after you comply with the above conditions, Owner will return to you one fully signed counterparts of the Agreement with the Contract Documents attached.
You are required to return an acknowledgement copy of this Notice of Award to the Owner.

Dated this _____ day of _____, 2017.

OWNER

_____

By _____

Title _____

Date _____ 20___

ACCEPTANCE OF AWARD

CONTRACTOR

_____

By _____

Title _____

Date _____ 20___

Copy to Engineer

(Use Certified Mail, Return Receipt requested)

END OF DOCUMENT 005100

TEC Report to the Board
June 2017

Programs & Projects	Effort Level LOW MED HIGH	Completion Date	Comments
Projects			
Priority Lakes		2017	Report is completed for Goose & Wilkinson Project Study. Vegetation survey to be done on Wilkinson later in the year. Fish surveys will be done in 2017 on Goose & Wilkinson.
Sucker Lake Channel		2017	JPA is finalized; reviewing final plans; go out for bid in late June
Lambert Creek - Koehler		2017	Project complete, grant finalized
Birch Lake		2017	Barr Engineering is doing assessment work for a project at 4th & Otter Lake Road. Results should be ready in July 2017.
Whitaker Wetlands		2017	Plans and specs complete, out for bid for construction contractor
Programs			
Outreach		ongoing	An outreach initiative to promote Spring workshops - flyers, social media, city/township newsletters. Planning and preparing the summer booth: toilet leak test tablets, games for adults and kids, tote bag prizes, and craft soda
Education		ongoing	New relationships and school visits established with Birch and Lincoln Elementaries, as well as visiting previous connections Lake Aires and Vadnais Elementary for raingarden clean-ups.
Website		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		ongoing	WAV members are advising and asisting the Adopt-a-Drain pilot program. Volunteer groups are in planning phases to participate in stormdrian stenciling: Alina Nurses and local scout troops.
Cost Share		ongoing	Two LL2 grants to consider in June which could exhaust funds; all LL1 money is gone.
GIS		ongoing	
Monitoring		ongoing	2017 full season monitoring to begin May 2nd 2017
Admin & Operation			
SLMPs		2017	Charley Lake SLMP is currently being worked on; studies being completed.
Audit & annual reporting		May 2017	Annual audit and report is complete and has been distributed. They are available on the website and in the office.
Administration		2017	Draft Budget 2018 will go the Board in June for final consideration. Based on the 2018 budget, SSU rates for next year will be set in August.
WCA		ongoing	New season underway

TEC Report to the Board
June 2017

FINANCIAL SUMMARY as of 6/1/2017			
4M Account (.56)	Reserve Savings (.01)	4M Plus (.64)	Total
$124,250		$49,867	$174,117

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

Budget Summary	Actual Expense YTD	2017 Budget as amended	Remaining in Budget	% YTD
Operations	$246,764	$554,660	$307,896	44%
CIP	$157,814	$746,575	$588,761	21%

VLAWMO
Vadnais Lake Area
Water Management Organization

800 County Road E E, Vadnais Heights, MN 55127
www.vlawmo.org; Office@vlawmo.org

To: the Board of Directors

From: Stephanie McNamara

Re: Financial Summary – June 2017

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. I did ask for and receive a $50,000 advance on this 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 00.56% 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 in 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.

Jun-17	budget #		Actual 6/9/17	Actual to Date	2017 Budget	over/ Grants	Remaining in Budget	available (B+C/O)	Actu al vs.
NEW BUDGET #	**INCOME 5.1**								
5.11	6.5.5.1	Storm Water Utility	$50,000	$64,183	$564,360	$0	$500,177	$564,360	11%
5.12	6.5.1	Service Fees		$12	$500	$0	$488	$500	2%
5.13	6.5.2	Interest	$74	$413	$200	$0	($213)	$200	206%
5.14	6.5.3	Misc. income - WCA admin grant	$25	$2,893	$5,000	$0	$2,107	$5,000	58%
5.15	6.5.5.2	Other Income Grants	$6,929	$6,929	$0	$0	($6,929)	$0	
5.16	6.5.6	Transfer from reserves		$90,000	$75,000	$0	($15,000)	$75,000	120%
	Total		$57,028	$164,430	$645,060	$0	$480,630	$645,060	25%
		EXPENSES							
3.0	6.1	**Operations & Administration**							
3.010	6.1.1.1	Office - rent, copies, post tel sup	$2,120	$11,106	$22,660	$0	$11,554	$22,660	49%
3.020	6.1.1.2	Information Systems	$3,268	$7,022	$19,500	$2,500	$14,978	$22,000	32%
3.030	6.1.1.3	Insurance	$2,728	$4,262	$5,200	$500	$1,438	$5,700	75%
3.041	6.1.1.5	Consulting - Audit	$6,170	$6,170	$6,800	$0	$630	$6,800	91%
3.042	6.1.1.6	Consulting - Bookkeeping	$160	$1,420	$1,500	$0	$80	$1,500	95%
3.043	6.1.1.7	Consulting - Legal		$1,354	$3,000	$5,000	$6,646	$8,000	17%
3.050	6.3.8.4	Storm Sewer Utility		$1,682	$16,000	$0	$14,318	$16,000	11%
3.060	6.1.3	Training (staff/board)		$565	$4,000	$0	$3,435	$4,000	14%
3.070	6.1.4	Misc. & mileage	$487	$1,546	$7,000	$4,000	$9,454	$11,000	14%
3.091	6.1.2	Administration - staff	$29,306	$161,762	$303,000	$10,000	$151,238	$313,000	52%
3.092	6.1.2.5	Employer Liability	$3,467	$38,344	$70,000	$0	$31,656	$70,000	55%
3.1	**Monitoring and Studies**								
3.110	6.3.8.2	Lake and Creek lab analysis	$3,870	$3,870	$18,000	$2,000	$16,131	$20,000	19%
3.120	6.3.8.1	Equipment	$25	$269	$2,500	$2,500	$4,731	$5,000	5%
3.2	**Education and Outreach**								
3.210	6.3.5.1	Public Education	$891	$5,505	$7,000	$1,500	$2,995	$8,500	65%
3.220	6.3.5.2	Marketing		$1,573	$7,000	$1,500	$6,927	$8,500	19%
3.230	6.3.5.3	Community Blue Ed Grant	$315	$315	$20,000	$12,000	$31,685	$32,000	1%
Total Core functions: Operations, Monitoring, Educati			*$52,808*	*$246,764*	$513,160	$41,500	$307,896	*$554,660*	*44%*
Capital Improvement Projects and Programs									
3.3	**Subwatershed Activity**								
3.310		Gem Lake			$0		$0	$0	
3.320	6.4.1.3	Lambert Creek	$17,460	$125,616	$401,000	$28,675	$304,059	$429,675	29%
3.325	6.4.6	Goose Lake		$4,621	$14,900	$75,000	$85,279	$89,900	5%
3.330		Birch Lake	$1,685	$3,047	$5,700	$15,000	$17,653	$20,700	15%
3.340		Gilf Black Tam Wilk Amelia	$3,397	$13,377	$17,600		$4,223	$17,600	76%
3.350		Pleasant Charley Deep			$5,700		$5,700	$5,700	0%
3.360	6.1.1.8	Sucker Vadnais			$0	$65,000	$65,000	$65,000	0%
3.370	6.3.6	Facilities Maintenance	$140	$338	$10,000	$18,000	$27,662	$28,000	1%
3.38	**Programs**								
3.381	6.3.4	Landscape 1 - cost-share	$2,356	$3,986	$24,000	$4,000	$24,014	$28,000	14%
3.382		Landscape 2			$30,000		$30,000	$30,000	0%
3.383	6.4.5.2	Project Research & feasibility - v	$4,178	$6,830	$17,000		$10,170	$17,000	40%
3.4	**Regulatory**								
3.410	6.1.1.9	Engineer Plan review			$5,000	$10,000	$15,000	$15,000	0%
	Total CIP & Program		*$29,216*	*$157,814*	$530,900	$215,675	*$588,761*	*$746,575*	*21%*
	Total of Core Operations & CIP		**$82,023**	$404,578	$1,044,060	$257,175	**$896,657**	$1,301,235	**31%**

Fund Balance	Bal 5/31/17	6/1/17
4M Account	$124,250	$42,226
4M Plus Savings	$49,867	$49,867
Total	$174,117	$92,093

Restricted funds	4/30/2017
Mitigation Savings	$39,445
Term Series (NA)	

	Type	Date	Num	Name	Memo	Original Amour	Paid Amount
Ordinary Income/Expense							
Income							
Misc.							
	Sales Receipt	05/11/2017	142	Misc.	Misc income 5 books sold at Native p	25.00	25.00
Total Misc.							25.00
5.1 · Income							
5.11 · Storm Water Utility							
	Deposit	05/24/2017		Ramsey County	Advance on July SSU payment	50,000.00	50,000.00
Total 5.11 · Storm Water Utility							50,000.00
5.13 · Interest							
	Deposit	05/31/2017			Deposit	44.05	44.05
	Deposit	05/31/2017			Deposit	29.76	29.76
Total 5.13 · Interest							73.81
5.15 · Other Income Grants							
	Invoice	05/10/2017	160	State of Minnesota	Grant payments Whitaker Wetlands	6,929.39	6,929.39
Total 5.15 · Other Income Grants							6,929.39
Total 5.1 · Income							57,003.20
Total Income							57,028.20
Gross Profit							57,028.20
Expense							
3.0 · Administrative/Operations							
3.010 · Office							
Copies							
	Check	06/09/2017	4349	City of Vadnais Heights	May color copies	32.41	32.41
	Check	06/09/2017	4349	City of Vadnais Heights	May B/w copies	7.27	7.27
	Check	06/09/2017	4349	City of Vadnais Heights	Rent, Copies, postage, phone		
	Check	06/09/2017	4349	City of Vadnais Heights	Rent, Copies, postage, phone		
Total Copies							39.68
Phone/Internet/Machine Overhead							
	Check	06/09/2017	4349	City of Vadnais Heights	June phone/computer connection	175.00	175.00
Total Phone/Internet/Machine Overhead							175.00
Postage							
	Check	06/09/2017	4349	City of Vadnais Heights	May postage	60.00	60.00
	Check	06/09/2017	4349	City of Vadnais Heights	Rent, Copies, postage, phone		
	Check	06/09/2017	4349	City of Vadnais Heights	Rent, Copies, postage, phone		
Total Postage							60.00
Rent							

	Type	Date	Num	Name	Memo	Original Amour	Paid Amount
	Check	06/09/2017	4349	City of Vadnais Heights	June rent	1,450.00	1,450.00
Total Rent							1,450.00
Supplies							
	Check	06/09/2017	4346	Innovative	Inv 1617217	171.69	171.69
Total Supplies							171.69
3.010 · Office - Other							
	Check	06/09/2017	4349	City of Vadnais Heights	May postage	223.28	223.28
Total 3.010 · Office - Other							223.28
Total 3.010 · Office							2,119.65
3.020 · Information Systems							
IT Support							
	Check	06/09/2017	4344	City Of Roseville	Invs 0221786, 0222530, 0222838, 02	3,214.32	3,214.32
Total IT Support							3,214.32
Software							
	Credit Card Charge	05/08/2017		Adobe "Creative Cloud		53.55	53.55
Total Software							53.55
Total 3.020 · Information Systems							3,267.87
3.041 · Audit							
	Check	06/09/2017	4339	CliftonLarsonAllen	2016 Audit	6,170.00	6,170.00
Total 3.041 · Audit							6,170.00
3.042 · Bookkeeping help							
	Check	06/09/2017	4343	Julie Yoho	May bookkeeping	160.00	160.00
Total 3.042 · Bookkeeping help							160.00
3.070 · Misc. & mileage							
	Credit Card Charge	05/04/2017		Panera Bread	SPRWS thank you	40.00	40.00
	Credit Card Charge	05/11/2017		Fresh Thyme	TEC mtg	17.97	17.97
	Check	06/09/2017	4332	Stephanie Oliver McNamara		241.82	241.82
	Check	06/09/2017	4333	Brian Corcoran		55.64	55.64
	Check	06/09/2017	4334	Tyler J Thompson	May mileage	51.63	51.63
	Check	06/09/2017	4335	Nicholas Voss	May Mileage	41.20	41.20
	Check	06/09/2017	4336	Kristine Jenson	Mileage - May	38.79	38.79
Total 3.070 · Misc. & mileage							487.05
3.091 · Administration							
3.092 · Employer Liabilities							
Admin payroll processing							
	Check	06/09/2017	4342	City of White Bear Lake		44.92	44.92
Total Admin payroll processing							44.92
Administration FICA							
	Check	06/09/2017	4342	City of White Bear Lake		1,689.08	1,689.08
Total Administration FICA							1,689.08
Administration PERA							

	Type	Date	Num	Name	Memo	Original Amour	Paid Amount
	Check	06/09/2017	4342	City of White Bear Lake		1,733.28	1,733.28
Total Administration PERA							1,733.28
Insurance Benefit							
	Check	05/17/2017		Reliance Standard	Short-term Disability - June	160.95	160.95
	Check	05/25/2017		SelectAccount	HSA fee	5.00	5.00
	Check	06/09/2017	4342	City of White Bear Lake	Ins	2,145.82	2,145.82
	Check	06/09/2017	4342	City of White Bear Lake		416.70	416.70
Total Insurance Benefit							2,728.47
Total 3.092 · Employer Liabilities							6,195.75
6.1.2.1 · Management							
	Check	06/09/2017	4342	City of White Bear Lake		6,816.00	6,816.00
Total 6.1.2.1 · Management							6,816.00
6.1.2.3 · GIS							
	Check	06/09/2017	4342	City of White Bear Lake		3,244.80	3,244.80
Total 6.1.2.3 · GIS							3,244.80
6.1.2.4 · Water Resources Technician							
	Check	06/09/2017	4342	City of White Bear Lake		4,286.40	4,286.40
Total 6.1.2.4 · Water Resources Technician							4,286.40
6.1.2.5 · Program Coordinator							
	Check	06/09/2017	4342	City of White Bear Lake		5,291.22	5,291.22
Total 6.1.2.5 · Program Coordinator							5,291.22
6.1.2.6 · Education & Outreach							
	Check	06/09/2017	4342	City of White Bear Lake		3,472.00	3,472.00
Total 6.1.2.6 · Education & Outreach							3,472.00
Total 3.091 · Administration							29,306.17
Total 3.0 · Administrative/Operations							41,510.74
3.1 · Monitoring and Studies							
3.110 · Lake & Creek lab analysis							
	Check	06/09/2017	4345	Pace Analytical	Invs 171279506, 171279570, 17127	3,869.50	3,869.50
Total 3.110 · Lake & Creek lab analysis							3,869.50
3.120 · Equipment							
	Check	06/09/2017	4333	Brian Corcoran	May	9.68	9.68
	Check	06/09/2017	4334	Tyler J Thompson	Monitoring equipment	15.77	15.77
Total 3.120 · Equipment							25.45
Total 3.1 · Monitoring and Studies							3,894.95
3.2 · Education and Outreach							
3.210 · Public Education							
	Credit Card Charge	05/08/2017		Amazon.com	Water drop costume	28.37	28.37
	Credit Card Charge	05/09/2017		HyVee	treats for Native Plant Workshop	22.13	22.13
	Credit Card Charge	05/09/2017		Amazon.com	Water drop costume	36.08	36.08

	Type	Date	Num	Name	Memo	Original Amour	Paid Amount
	Credit Card Charge	05/16/2017		Home Depot	Storm drain stencil materials	38.88	38.88
	Credit Card Charge	05/24/2017		Vista Print	business cards, stickers	38.51	38.51
	Check	06/09/2017	4335	Nicholas Voss	Hardware Hank purchase	18.67	18.67
	Check	06/09/2017	4336	Kristine Jenson	Plant purchase	44.46	44.46
	Check	06/09/2017	4337	ARC Document Solutions, LL	2017 Annual Report Printing	664.17	664.17
Total 3.210 · Public Education							891.27
3.230 · Community Blue Education Grant							
	Check	06/09/2017	4350	White Bear Lake Area Public	Community Blue Grant - Climb Theat	315.00	315.00
Total 3.230 · Community Blue Education Grant							315.00
Total 3.2 · Education and Outreach							1,206.27
3.3 · Subwatershed Activity							
3.320 · Lambert Creek Restoration							
Lambert - Kohler flume							
	Check	05/17/2017	4330	Outdoor Lab	2 of 2 payments on Lambert - Koehle	17,222.73	17,222.73
	Credit Card Charge	05/30/2017		Menards		196.96	196.96
Total Lambert - Kohler flume							17,419.69
Whitaker Wetlands							
	Check	06/09/2017	4331	Press Publications	49241	40.80	40.80
Total Whitaker Wetlands							40.80
Total 3.320 · Lambert Creek Restoration							17,460.49
3.330 · Birch Lake							
	Check	06/09/2017	4347	Barr Engineering Co	23621249.00-3 birch	1,684.50	1,684.50
Total 3.330 · Birch Lake							1,684.50
3.340 · Gilfillan Black Tamarack Wilkin							
	Check	06/09/2017	4347	Barr Engineering Co	23621238.00-5 goose/wilk	3,397.29	3,397.29
Total 3.340 · Gilfillan Black Tamarack Wilkin							3,397.29
3.370 · Facilities & Maintenance							
	Check	06/09/2017	4338	Mary Sherping	St. Mary Raingarden Mulch	140.18	140.18
Total 3.370 · Facilities & Maintenance							140.18
Total 3.3 · Subwatershed Activity							22,682.46
3.38 · Programs							
3.381 · Landscape 1 - cost-share							
	Check	06/09/2017	4340	Dawn Paulson	raingarden grant - final payment	523.74	523.74
	Check	06/09/2017	4341	Maria Papagianni	Payment 1 for Grant 2016-07	1,831.76	1,831.76
Total 3.381 · Landscape 1 - cost-share							2,355.50
3.383 · Project Research & feasibility							
Bacteria Project							
	Check	06/09/2017	4348	Burns & McDonnell	2016 bacterial source id study	388.00	388.00
Total Bacteria Project							388.00
3.383 · Project Research & feasibility - Other							

	Type	Date	Num	Name	Memo	Original Amour	Paid Amount
	Check	06/09/2017	4348	Burns & McDonnell	2017 bacterial source id study	3,789.68	3,789.68
Total 3.383 · Project Research & feasibility - Other							3,789.68
Total 3.383 · Project Research & feasibility							4,177.68
Total 3.38 · Programs							6,533.18
Total Expense							75,827.60
Net Ordinary Income							-18,799.40
Net Income							**-18,799.40**

Vadnais Lake Area Water Management Organization

Check Detail

May 4 through June 9, 2017

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Check		**05/17/2017**	**Reliance Standard**		**Checking - 1987**		**-160.95**
						Insurance Benefit	-160.95	160.95
TOTAL							-160.95	160.95
	Check		**05/25/2017**	**SelectAccount**		**Checking - 1987**		**-5.00**
						Insurance Benefit	-5.00	5.00
TOTAL							-5.00	5.00
	Check	**4330**	**05/17/2017**	**Outdoor Lab**		**Checking - 1987**		**-17,222.73**
						Lambert - Kohler flume	-17,222.73	17,222.73
TOTAL							-17,222.73	17,222.73
	Check	**4331**	**06/09/2017**	**Press Publications**		**Checking - 1987**		**-40.80**
						Whitaker Wetlands	-40.80	40.80
TOTAL							-40.80	40.80
	Check	**4332**	**06/09/2017**	**Stephanie Oliver McNamara**		**Checking - 1987**		**-241.82**
						3.070 · Misc. & mileage	-241.82	241.82
TOTAL							-241.82	241.82
	Check	**4333**	**06/09/2017**	**Brian Corcoran**		**Checking - 1987**		**-65.32**
						3.120 · Equipment	-9.68	9.68
						3.070 · Misc. & mileage	-55.64	55.64
TOTAL							-65.32	65.32
	Check	**4334**	**06/09/2017**	**Tyler J Thompson**		**Checking - 1987**		**-67.40**
						3.070 · Misc. & mileage	-51.63	51.63
						3.120 · Equipment	-15.77	15.77
TOTAL							-67.40	67.40

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Check	**4335**	**06/09/2017**	**Nicholas Voss**		**Checking - 1987**		**-59.87**
						3.070 · Misc. & mileage	-41.20	41.20
						3.210 · Public Education	-18.67	18.67
TOTAL							-59.87	59.87
	Check	**4336**	**06/09/2017**	**Kristine Jenson**		**Checking - 1987**		**-83.25**
						3.070 · Misc. & mileage	-38.79	38.79
						3.210 · Public Education	-44.46	44.46
TOTAL							-83.25	83.25
	Check	**4337**	**06/09/2017**	**ARC Document Solutions, LLC**		**Checking - 1987**		**-664.17**
						3.210 · Public Education	-664.17	664.17
TOTAL							-664.17	664.17
	Check	**4338**	**06/09/2017**	**Mary Sherping**		**Checking - 1987**		**-140.18**
						3.370 · Facilities & Maintenance	-140.18	140.18
TOTAL							-140.18	140.18
	Check	**4339**	**06/09/2017**	**CliftonLarsonAllen**		**Checking - 1987**		**-6,170.00**
						3.041 · Audit	-6,170.00	6,170.00
TOTAL							-6,170.00	6,170.00
	Check	**4340**	**06/09/2017**	**Dawn Paulson**		**Checking - 1987**		**-523.74**
						3.381 · Landscape 1 - cost-share	-523.74	523.74
TOTAL							-523.74	523.74
	Check	**4341**	**06/09/2017**	**Maria Papagianni**		**Checking - 1987**		**-1,831.76**
						3.381 · Landscape 1 - cost-share	-1,831.76	1,831.76
TOTAL							-1,831.76	1,831.76

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Check	**4342**	**06/09/2017**	**City of White Bear Lake**		**Checking - 1987**		**-29,140.22**
						6.1.2.4 · Water Resources Technician	-4,286.40	4,286.40
						6.1.2.5 · Program Coordinator	-5,291.22	5,291.22
						6.1.2.1 · Management	-6,816.00	6,816.00
						6.1.2.3 · GIS	-3,244.80	3,244.80
						6.1.2.6 · Education & Outreach	-3,472.00	3,472.00
						Administration FICA	-1,689.08	1,689.08
						Administration PERA	-1,733.28	1,733.28
						Insurance Benefit	-2,145.82	2,145.82
						Admin payroll processing	-44.92	44.92
						Insurance Benefit	-416.70	416.70
TOTAL							-29,140.22	29,140.22
	Check	**4343**	**06/09/2017**	**Julie Yoho**		**Checking - 1987**		**-160.00**
						3.042 · Bookkeeping help	-160.00	160.00
TOTAL							-160.00	160.00
	Check	**4344**	**06/09/2017**	**City Of Roseville**		**Checking - 1987**		**-3,214.32**
						IT Support	-3,214.32	3,214.32
TOTAL							-3,214.32	3,214.32
	Check	**4345**	**06/09/2017**	**Pace Analytical**		**Checking - 1987**		**-3,869.50**
						3.110 · Lake & Creek lab analysis	-3,869.50	3,869.50
TOTAL							-3,869.50	3,869.50
	Check	**4346**	**06/09/2017**	**Innovative**		**Checking - 1987**		**-171.69**
						Supplies	-171.69	171.69
TOTAL							-171.69	171.69

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Check	**4347**	**06/09/2017**	**Barr Engineering Co**		**Checking - 1987**		**-5,081.79**
						3.330 · Birch Lake	-1,684.50	1,684.50
						3.340 · Gilfillan Black Tamarack Wilkin	-3,397.29	3,397.29
TOTAL							-5,081.79	5,081.79
	Check	**4348**	**06/09/2017**	**Burns & McDonnell**		**Checking - 1987**		**-4,177.68**
						Bacteria Project	-388.00	388.00
						3.383 · Project Research & feasibility	-3,789.68	3,789.68
TOTAL							-4,177.68	4,177.68
	Check	**4349**	**06/09/2017**	**City of Vadnais Heights**		**Checking - 1987**		**-1,947.96**
						Rent	-1,450.00	1,450.00
						Phone/Internet/Machine Overhead	-175.00	175.00
						Postage	-60.00	60.00
						Copies	-32.41	32.41
						Copies	-7.27	7.27
						3.010 · Office	-223.28	223.28
TOTAL							-1,947.96	1,947.96
	Check	**4350**	**06/09/2017**	**White Bear Lake Area Public Schools**		**Checking - 1987**		**-315.00**
						3.230 · Community Blue Education Grant	-315.00	315.00
TOTAL							-315.00	315.00

Vadnais Lake Area Water Management Organization
Custom Transaction Detail Report
May 4 through June 9, 2017

	Type	Date	Iur	Name	Memo	Account	Clr	Split	Amount	Balance
May 4 - Jun 9, 17										
	Credit Card Charge	05/04/2017		Panera Bread	SPRWS thank you	US Bank CC	*	3.070 · Misc. & mileage	40.00	40.00
	Credit Card Charge	05/08/2017		Adobe "Creative Cloud		US Bank CC	*	Software	53.55	93.55
	Credit Card Charge	05/08/2017		Amazon.com		US Bank CC		3.210 · Public Education	28.37	121.92
	Credit Card Charge	05/09/2017		HyVee	treats for Native Plant Worksho	US Bank CC		3.210 · Public Education	22.13	144.05
	Credit Card Charge	05/09/2017		Amazon.com		US Bank CC		3.210 · Public Education	36.08	180.13
	Credit Card Charge	05/11/2017		Fresh Thyme	TEC refreshments	US Bank CC		3.070 · Misc. & mileage	17.97	198.10
	Credit Card Charge	05/16/2017		Home Depot	Storm drain stencil materials	US Bank CC		3.210 · Public Education	38.88	236.98
	Credit Card Charge	05/24/2017		Vista Print	business cards - Nick & Kris	US Bank CC		3.210 · Public Education	38.51	275.49
	Credit Card Charge	05/30/2017		Menards		US Bank CC		Lambert - Kohler flume	196.96	472.45
May 4 - Jun 9, 17									**472.45**	**472.45**

EST 1983
VLAWMO
Vadnais Lake Area
Water Management Organization

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

June 22, 2017
To: The VLAWMO Board of Directors
From: Kristine Jenson, Program Manager
Re: VI.C. Project Updates – Sucker Channel and Birch Lake

1. Sucker Channel Restoration

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

Barr Engineering is working on the plans for improving the wetland to the northeast of Birch Lake. The wetland captures stormwater runoff from a residential neighborhood and then empties to Birch Lake. Previous grab samples have shown relatively large amounts of phosphorus from this site. The City of White Bear Lake partnered on the costs of having Barr Engineering work on what project(s) would help this site. Greg Wilson from Barr is expecting the plans to be ready within the next month for this project. I have contacted him to see if the plans could be shown to us as soon as possible because I have been researching potential grant opportunities to help pay for projects and there is one through Met Council that is due July 17. For the submittal, I don't need the finalized plans but I would need to have a good idea of what we hope to do at the site and a cost estimate. The grant is called the Green Infrastructure Pilot Grant Program and the City of White Bear Lake would have to be the application sponsor and requires an equal match to all awarded grant funds. We have $20,000 in the 2018 budget to go towards this project.

If Barr Engineering is able to get us enough information to apply and the City of White Bear Lake is willing to sponsor the application, is the Board supportive of VLAWMO staff preparing the application and working with the City to submit it by July 17?

EST 1983
VLAWMO
Vadnais Lake Area
Water Management Organization

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

June 22, 2017
To: The VLAWMO Board of Directors
From: Nick Voss, Education and Outreach Coordinator
Re: VI.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 Stormdrain 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. **Stormpond/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 before reading the actual policy. The documents will be used together help increase understanding on buffers along the different levels of decision-making and development.

Public: An overall description of buffers, why they're beneficial, and that there are policies in place to support them. Cities are encouraged to disperse this information to the public for enforcement to support their role in acting as the Local Governing Unit (LGU), outlined in the policy.

City officials: Highlights of the water policy that pertain to buffers, a more detailed look at why buffers are important, a glimpse at buffer width requirements, and options for how to support the policy. Cities benefit from this information to support more behind-the-scenes knowledge of buffers and increase familiarity with the water policy.

Select city officials and developers: Charts and text containing dimensions of pre and post 2016 buffer regulations from the water policy. Encouragement to contact VLAWMO at fine levels of detail.

EST 1983
VLAWMO
Vadnais Lake Area
Water Management Organization

800 County Road E East, Vadnais Heights, MN 55127
www.vlawmo.org

Date: June 22, 2017

To: the Board of Directors

From: Kristine Jenson, Program Manager

Re: VI.E. Landscape Level 2 (LL2) Application Considerations

Due to newer members joining the Board, I will provide a brief summary of how the LL2 program works:
To be considered for an LL2 project, an applicant must be pursuing a water quality project that has a total cost of at least $5,000, and they must be willing to ensure maintenance of the project for at least 5 years, and to provide some sort of education outreach regarding their project. In the past, we have awarded this level of grant to projects such as raingardens and native prairie plantings at White Bear Montessori School, a buffer along Lambert Creek for a homeowner's association, and the green roof at White Bear Lake Public Works. The Technical Commission (TEC) reviews these grant applications and provides a recommendation to the Board who then makes the final decision and determines the award amount. If the project is approved, VLAWMO and the applicant enter into an agreement and 85% of the grant is released to them once the applicant shows final plans (if needed), and proof that they have entered into a contract with the installer with construction to begin within 60 days. Once the project is complete and proof of payment is submitted, VLAWMO staff will inspect the site and will release the final 15% of the grant.

For 2017, there is $30,000 in the budget to go towards LL2 projects. If both of the projects are approved this month, the budget would be exhausted for the year. We have never experienced this before and it could be considered a good problem to have. All of our Landscape Level 1 funds (for smaller-scale projects) were exhausted in May of this year. It is unprecedented for the Landscape Grant programs to run out of money so early in the year (LL2 has never run out of money before). It is indicative of the word spreading for these valuable programs.

The two applications submitted and up for your consideration are:
1. 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 points on the property. They plan to install the Rainbird IQ system at two of the points 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. They are installing the Rainbird system on only 2 spots at this time because they are $6555 each. The Solar system will cost $410 for each spot. 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.**

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 initial plans include approximate 1500 sq ft of permeable patio, 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.**

Landscape Level 2 Grant Agreement

This agreement is made the 28th day of June, 2017, by and between the Vadnais Lake Area Water Management Organization, (hereinafter "WMO") and The Pines of North Oaks, c/o Paul Oie, 1310 E. Highway 96, White Bear Lake, MN 55110, (hereinafter "Grantee").

1. BACKGROUND
   - 1.1 The WMO has included in its annual budget funds to cost-share with approved Landowners to implement best management practices within the watershed boundaries.
   - 1.2 Grantee has applied to the WMO for funds to help pay for the costs of materials and labor for the installation of an irrigation efficiency system (hereinafter "Project") as described in the Landscape Level 2 Grant Application attached herein as Exhibit A.
   - 1.3 The VLAWMO Board of Directors has concluded the project is viable and executable and approved the Grantee's Application at its meeting on June 28, 2017.
   - 1.4 The Board of Directors has agreed to award a grant in the amount of $10,000 for the Project described in Exhibit A.

2. GRANTEE'S DUTIES
   - 2.1 The Project will be constructed per the general design and plans attached as Exhibit A. Substantive variations on the design will be discussed with the Grantor prior to implementation.
   - 2.2 Grantee must obtain all permits required in conjunction with the Project, if necessary.
   - 2.3 The Grantee will include VLAWMO and its Landscape Grant Program information on any signs or outreach material created for this project. VLAWMO will submit their logo to the Grantee for use on those materials.
   - 2.4 Grantee agrees to allow the WMO access and photograph the Project area for Watershed purposes, including but not limited to, inspections, tours, research, and community outreach.
   - 2.5 Grantee or successors shall be responsible for the full establishment, operation and maintenance of all practices to ensure that the conservation objectives of the Project are met for a minimum of 5 years. Maintenance duties will likely include: watering, weeding, replacing mulch, replacing plants, repair of inlets/outlets, among other maintenance activities. The WMO will conduct maintenance checks of the site over the course of the 5 year Agreement period and will advise the Grantee of needed maintenance if issues are identified.
   - 2.6 Should the Grantee fail to maintain the Project for 5 years, the Grantee shall be liable to VLAWMO for up to 100% of the amount of financial assistance received to install and establish the Project unless the failure was caused by reasons beyond the Grantee's control or if an equivalent protection of soil and water resources was installed at the Grantee's expense.

2.7 If the title to this land is transferred to another party before expiration of the contract, it shall be the responsibility of the Grantee to advise the new owner that this contract is in force.

2.8 The Project shall be installed by July 1, 2018 unless this Agreement is amended by mutual consent to reschedule work and funding.

3. FINANCIALS

3.1 Eighty-five percent ($8,500) of the grant award will be sent to the Grantee upon proof of a signed agreement with a designer, engineer, or contractor for the Project, or within 60 days of Project installation. The final fifteen percent ($1,500) of the grant will be issued once the Project is complete, a WMO representative has conducted a site visit, and the Grantee submits a final financial report to the WMO listing the final expenses for the activity, along with proof of payment. Materials eligible for reimbursement shall be those that are used solely for the Project. Labor costs must be incurred through a professional company for work done on the project as described in Exhibit A.

3.2 Any grant funds remaining unspent after the Practices have been installed will be returned to the WMO within one month of the date of the final site inspection by WMO staff.

4. GENERAL TERMS

4.1 Effective Date: The date the WMO obtains all required signatures on this Agreement. The Grantee must not begin work under this Agreement until the Agreement is fully executed and the Landowner has been notified by the WMO to begin work.

4.2 Expiration Date: July 1, 2022, or until all obligations have been satisfactorily fulfilled, whichever comes first.

4.3 This Agreement will remain in effect unless cancelled by mutual agreement, except where installations of Projects covered by this Agreement have not been substantially commenced as determined by the WMO within one (1) year of execution of this Agreement, in which case this Agreement will be automatically terminated on that date. If weather or other conditions beyond the control of the WMO do not permit the completion of this Project within one year after approval, this Agreement may be amended, by mutual written consent of the parties, to reschedule the Project and funding.

4.4 The WMO will not be an employer with or of the Grantee for any purpose. Nothing herein authorizes Grantee to act as an agent or representative of the WMO for any purpose whatsoever.

4.5 Grantee shall indemnify, defend and hold the WMO and its agents, employees, officers and contractors harmless from all claims made by Grantee and/or third parties for damage or loss sustained or costs incurred, including but not limited to WMO staff, engineering and attorney's fees, in connection with or arising out of the issuance of and/or acceptance and payment by the WMO of funds pursuant to this cost-share, construction of the project, or this agreement.

4.6 Upon termination of this agreement, Grantee shall promptly return all funds to VLAWMO.

6. SIGNATURES

Date	Landowner Authorized Signature
	Landowner PRINTED NAME
Date	VLAWMO Signature
	Title

Landscape Level 2 Grant Agreement

This agreement is made the 28th day of June, 2017, by and between the Vadnais Lake Area Water Management Organization, (hereinafter "WMO") and Little Goose Development Corp, LLC, c/o Kurt Carpenter, 1947 Rishworth Lane, White Bear Lake, MN 55110, (hereinafter "Grantee").

1. BACKGROUND
   - 1.1 The WMO has included in its annual budget funds to cost-share with approved Landowners to implement best management practices within the watershed boundaries.
   - 1.2 Grantee has applied to the WMO for funds to help pay for the costs of materials and labor for the installation of best management practices, including permeable paver surfaces, raingardens, and a shoreline buffer at Cabin 61, located at 4150 Hoffman Road, White Bear Lake, MN 55110 (hereinafter "Project") as described in the Landscape Level 2 Grant Application attached herein as Exhibit A.
   - 1.3 The VLAWMO Board of Directors has concluded the project is viable and executable and approved the Grantee's Application at its meeting on June 28, 2017.
   - 1.4 The Board of Directors has agreed to award a grant in the amount of $20,000 for the Project described in Exhibit A.

2. GRANTEE'S DUTIES
   - 2.1 The Project will be constructed per the general design and plans attached as Exhibit A. Substantive variations on the design will be discussed with the Grantor prior to implementation.
   - 2.2 Grantee must obtain all permits required in conjunction with the Project, if necessary.
   - 2.3 The Grantee will include VLAWMO and its Landscape Grant Program information on any signs or outreach material created for this project. VLAWMO will submit their logo to the Grantee for use on those materials.
   - 2.4 Grantee agrees to allow the WMO access and photograph the Project area for Watershed purposes, including but not limited to, inspections, tours, research, and community outreach.
   - 2.5 Grantee or successors shall be responsible for the full establishment, operation and maintenance of all practices to ensure that the conservation objectives of the Project are met for a minimum of 5 years. Maintenance duties will likely include: watering, weeding, replacing mulch, replacing plants, repair of inlets/outlets, among other maintenance activities. The WMO will conduct maintenance checks of the site over the course of the 5 year Agreement period and will advise the Grantee of needed maintenance if issues are identified.
   - 2.6 Should the Grantee fail to maintain the Project for 5 years, the Grantee shall be liable to VLAWMO for up to 100% of the amount of financial assistance received to install and establish the Project unless the failure was caused by reasons beyond the Grantee's control

or if an equivalent protection of soil and water resources was installed at the Grantee's expense.

2.7 If the title to this land is transferred to another party before expiration of the contract, it shall be the responsibility of the Grantee to advise the new owner that this contract is in force.

2.8 The Project shall be installed by July 1, 2018 unless this Agreement is amended by mutual consent to reschedule work and funding.

3. FINANCIALS

3.1 Eighty-five percent ($17,000) of the grant award will be sent to the Grantee upon proof of a signed agreement with a designer, engineer, or contractor for the Project, or within 60 days of Project installation. The final fifteen percent ($3,000) of the grant will be issued once the Project is complete, a WMO representative has conducted a site visit, and the Grantee submits a final financial report to the WMO listing the final expenses for the activity, along with proof of payment. Materials eligible for reimbursement shall be those that are used solely for the Project. Labor costs must be incurred through a professional company for work done on the project as described in Exhibit A.

3.2 Any grant funds remaining unspent after the Practices have been installed will be returned to the WMO within one month of the date of the final site inspection by WMO staff.

4. GENERAL TERMS

4.1 Effective Date: The date the WMO obtains all required signatures on this Agreement. The Grantee must not begin work under this Agreement until the Agreement is fully executed and the Landowner has been notified by the WMO to begin work.

4.2 Expiration Date: July 1, 2022, or until all obligations have been satisfactorily fulfilled, whichever comes first.

4.3 This Agreement will remain in effect unless cancelled by mutual agreement, except where installations of Projects covered by this Agreement have not been substantially commenced as determined by the WMO within one (1) year of execution of this Agreement, in which case this Agreement will be automatically terminated on that date. If weather or other conditions beyond the control of the WMO do not permit the completion of this Project within one year after approval, this Agreement may be amended, by mutual written consent of the parties, to reschedule the Project and funding.

4.4 The WMO will not be an employer with or of the Grantee for any purpose. Nothing herein authorizes Grantee to act as an agent or representative of the WMO for any purpose whatsoever.

4.5 Grantee shall indemnify, defend and hold the WMO and its agents, employees, officers and contractors harmless from all claims made by Grantee and/or third parties for damage or loss sustained or costs incurred, including but not limited to WMO staff, engineering and attorney's fees, in connection with or arising out of the issuance of and/or acceptance and payment by the WMO of funds pursuant to this cost-share, construction of the project, or this agreement.

4.6 Upon termination of this agreement, Grantee shall promptly return all funds to VLAWMO.

6. SIGNATURES

Date	Landowner Authorized Signature
	Landowner PRINTED NAME
Date	VLAWMO Signature
	Title