

VLAWMO TECHNICAL COMMISSION MEETING

8:00 AM April 12, 2023

Vadnais Heights City Hall, Council Chambers, 800 County Road E East, Vadnais Heights, MN 55127

Action items: ✈

- I. **Call to Order – 8:00am –Chair Jesse Farrell**
 - A. Special announcement and presentation
- II. **Approval of Agenda**
- III. **Approval of Minutes (March 8, 2023)**
- IV. **Administration & Operations**
 - A. Financial Report for April and Authorization for Payment ✈ – Phil pg. 7
 - B. April TEC Report to Board ✈- Phil pg. 14
 - C. TEC representative on 2024 budget subcommittee - Phil
- V. **Programs**
 - A. Update on 2022 Annual Report and Monitoring Report - Nick and Brian pg. 20
 - B. Education update: Spring workshops, prints, website- Nick pg. 16
- VI. **Projects**
 - A. Wilkinson BMP/319 update - Dawn pg. 16
 - B. Spent Lime Oak Knoll Pond/Wood Lake update - Dawn pg. 17
 - C. Pleasant Lake carp removal update - Dawn pg. 17
 - D. Birch Lake AIS removal MN DNR grant/BLID partnership update - Dawn pg. 18
 - E. Vadnais-Sucker Lakes Regional Park restoration update - Lauren pg. 18
 - F. East Vadnais Lake subwatershed resiliency study update - Lauren pg. 19
- VII. **Commissioner Reports**
- VIII. **NOHOA**
- IX. **Ramsey Soil & Water Conservation Division**
- X. **St. Paul Regional Water Services**
- XI. **Public Comment**
- XII. **Next Meetings:** TEC: May 10th, Board Meeting: April 26th
- XIII. **Adjourn**

Upcoming Events:

Carp presentation with NOHOA: April 11th

Landscaping guest speaker: April 11th

Raingardens 101: April 20th

**Vadnais Lake Area Water Management Organization
Technical Commission (TEC) Minutes
March 8th, 2023
Vadnais Heights City Hall, Council Chambers
800 County Road E East, Vadnais Heights, MN 55127**

Commission Members Present:

Jesse Farrell	Chair, Vadnais Heights (VH)
Gloria Tessier	Vice Chair, Gem Lake (GL)
Andy Nelson	Lino Lakes (LL)
Terry Huntrods	White Bear Lake (WBL)
Jami Philip	White Bear Township (WBT)

Absent: North Oaks Commissioner (unassigned)

Others in attendance: Phil Belfiori, Dawn Tanner, Brian Corcoran, Lauren Sampedro, Nick Voss (VLAWMO staff), Susan Miller (North Oaks Home Owners' Association)

I. Call to Order

Chair Farrell called the meeting to order at 8:00 am.

II. Approval of Agenda

It was moved by Commissioner Tessier and seconded by Commissioner Huntrods to approve the March 8, 2023 TEC agenda Vote: all aye. Motion passed.

III. Approval of Minutes (Feb 8, 2023)

It was moved by Commissioner Huntrods and seconded by Commissioner Tessier to approve the February 8, 2023 meeting minutes as presented. Vote: all aye. Motion passed.

IV. Administration & Operations

A. Financial Report for March and Authorization for Payment

Administrator Belfiori highlighted page 9 of the TEC packet for the finance summary and the request for approval of March's invoices and payments. He noted that February and March is the annual audit season and anticipates a final report from the audit at the April Board meeting. Major expenses for the month pertained to the Wilkinson BMP project.

It was moved by Commissioner Tessier and seconded by Commissioner Nelson to approve the March financial report and authorization for payment. Vote: all aye. Motion passed.

V. Programs

A. Cost Share Packet Preview

Sampedro previewed new hardcopy site visit packets for the Soil Health and Landscape Level grant programs. The packet is intended to complement a site visit with education resources and tools to get started. Sampedro noted a new brochure focused on project planning and new guides for using VLAWMO's mapping tools and creating a project plan. Sampedro noted that one major benefit of using the folders is that it allows the impact of the site visit to be extended beyond the timeframe of the site visit itself. They also add a resource for VLAWMO affiliates to disperse the information.

Chair Farrell asked about what the significance of the native plant priority zone is. Sampedro provided that the map layer is informed by MN DNR native plant community data as well as habitat range for the Rusty-patched Bumblebee. Tanner noted that VLAWMO staff has a license to view the species of concern DNR database, and the TEP includes a DNR representative who also uses the database and evaluates projects with respect to species of conservation concern. Sampedro also provided that the DNR native plant community information that VLAWMO uses is public data. Tanner explained the plant community data shows the plant types from pre-European settlement that are expected to still be present today and need protection.

VI. Projects

A. Update on Wilkinson BMP

Tanner referred to the project design map included in the packet. She described that the wetland exemption has been approved through WCA and the USACE has provided guidelines regarding the general permit.

Other recent initiatives on the project include VLAWMO staff presenting at a joint NRC/NEST meeting in February about the project, which was recorded. An updated article was published in the March issue of North Oaks News, announcing an in-person community meeting that is scheduled for March 22nd. An April issue to the North Oaks News is being planned, focused on the 60% design status. Overall, the funds and timeline are tracking well.

B. Amelia SLMR Recommendation to the Board

Tanner outlined the difference between Sustainable Lake Management Plans (SLMPs) and Sustainable Lake Management Reports (SLMRs), noting that SLMRs compile information known to date, and project development is conducted in a more updated partner-focused

way watershed-wide Tanner shared some interesting notes that were learned through engagement with residents living around Amelia Lake including a watershed connection to Aldo Leopold, a legacy of conservation with multiple landowners on the lake, and the discovery of an infestation of invasive flowering rush that is planned for treatment in 2023. Planning for that treatment was a direct result of SLMR development and meeting with residents.

Staff are asking for TEC support for BOD authorization of the Amelia SLMR because it is the last installment of VLAWMO's SLMRs.

Commissioner Nelson noted that the report was excellent and that the history, landuse, survey information, and planning is convenient to have in one spot.

Commissioner Huntrods inquired about what comes next. Tanner noted that the importance is on keeping the plans updated with current information, such as monitoring data, so that they can be provided to stakeholders as needed and maintained with updated information. Annual updates are planned for the now-completed set of SLMP/SLMRs to keep them current, avoid loss of information, and have a readily available resource specific to each lake.

It was moved by Commissioner Huntrods and seconded by Commissioner Tessier to recommend to the VLAWMO Board the authorization/finalization of the Amelia SLMR and inclusion on the VLAWMO website. Vote: all aye. Motion passed.

C. Recognition of completion of 15-year SLMP/SLMR completion

Tanner explained more about the history of the SLMP/R effort that started in 2009. Plans are organized by lake because this is how VLAWMO organizes its work and how stakeholders tend to consider lake resources. Tanner explained that planning locations and strategic locations for prioritized, targeted, and measurable projects are important for grant funding, and the work that has been done to prepare these SLMP/SLMRs compile this information and help VLAWMO to be prepared for new projects and grant proposals. Tanner provided examples of recent grant-funded projects that have resulted from this process, highlighted how the 10-year plan has structured this process, showed where to find these documents on the VLAWMO website, and mentioned that the locations will be changing as the website update is completed.

D. Update on White Bear Township Smart Irrigation Grant Application

Sampedro provided an update on the in-progress grant application by noting White Bear Township submitted the Landscape Level 2 grant application and the application was brought to the February 28th Board meeting due to timing.. She highlighted the bids received as included in the TEC packet and shared the Board of Directors approved the application at 90% funding of the total cost of the project.

E. Update on City of Vadnais Heights Smart Irrigation Grant Application

Sampedro provided an update on the in-progress grant application by noting the City of Vadnais Heights submitted the Landscape Level 2 grant application and the application was brought to the February Board meeting due to timing. Sampedro noted this project will compare soil moisture-based and weather-based smart irrigation controller systems. She highlighted the bid received and shared this application was approved at the February Board of Directors meeting at 90% funding of the total cost of the project.

Chair Farrell noted that Vadnais Heights councilmembers are supportive of the effort and that it had been discussed with support at the Vadnais Heights City Council meeting.

F. Update on Westfield Park Bioswale Grant Application

Sampedro provided an update on the in-progress grant application by noting the City of Vadnais Heights submitted the Landscape Level 2 grant application and the application was brought to the February Board meeting due to timing. She described the proposed bioswale that will include a dry creek bed, rock checks, and native plants. She shared the Board approved the grant application at the February Board meeting at 50% of the total cost of the project.

Commissioner Tessier inquired about the location of Westfield Park. Chair Farrell noted that it's just south of Highway 96.

Chair Farrell commented that the project can serve as a demonstration for other municipalities. He noted that ideally there would be several projects of this type per year, but acknowledged budget and staff time constraints. Sampedro thanked the City for its partnership and noted that it's valuable to be working on these efforts that go above and beyond requirements but improve the overall Lambert Creek system.

I. Commissioner Reports

Chair Farrell provided an update on a possible project at Vadnais Blvd, which would be a new trail corridor. Ramsey County may pursue this for 2028. He noted that due to the current road conditions that a road construction effort may need to be included, and this brings numerous water quality protection opportunities. He noted that the high priority location near East Vadnais Lake would bring together many partners such as the Saint Paul Regional Water Services, Ramsey County, VLAWMO, and others. Administrator Belfiori noted that the trail vision is included in VLAWMO's 5-year strategic plan with budgeting that has been approved by the Board. He noted that this is a basic analysis with supporting data to then use in the pursuit of grant funds and partnerships.

II. NOHOA

None

III. Ramsey Soil & Water Conservation Division

None

IV. St. Paul Regional Water Services

None

V. Public Comment

None

VI. Next Meetings:

Next TEC meeting April 12th. Next BOD meeting April 26th.

XIII. Adjourn

It was moved by Commissioner Huntrods and seconded by Tessier to adjourn the meeting at 8:51 am. Vote: all aye. Motion passed.

Minutes compiled by Nick Voss.

VLAWMO Finance Summary: April 2023

Mar-23		Actual 4/1/23	Actual to Date	2023 Budget	Carry over from 2022 to 2023	Remaining in Budget	2023 Available	Act vs. Budget
BUDGET #	INCOME							
5.11	Storm Water Utility	\$0	\$10,891	\$1,090,887	\$0	\$1,079,996	\$1,090,887	1%
5.12	Service Fees	\$0	\$0	\$200	\$0	\$200	\$200	0%
5.13	Interest + mitigation acct	\$4,754	\$13,365	\$1,000	\$0	(\$12,365)	\$1,000	1337%
5.14	Misc. income - WCA admin & other	\$0	\$0	\$3,000	\$0	\$3,000	\$3,000	0%
5.15	Other Income Grants/loan	\$0	\$69,693	\$385,284	\$0	\$315,591	\$385,284	18%
5.16	Transfer from reserves	\$0	\$0	\$294,364	\$231,999	\$526,363	\$526,363	0%
	TOTAL	\$4,754	\$93,949	\$1,774,735	\$231,999	\$1,912,785	\$2,006,734	5%
EXPENSES								
3.1	Operations & Administration							
3.110	Office - rent, copies, post tel supplies	\$2,114	\$8,464	\$28,181	\$0	\$19,717	\$28,181	30%
3.120	Information Systems	\$1,546	\$6,014	\$33,300	\$0	\$27,286	\$33,300	18%
3.130	Insurance	\$0	\$0	\$7,571	\$0	\$7,571	\$7,571	0%
3.141	Consulting - Audit	\$1,785	\$8,061	\$9,000	\$0	\$939	\$9,000	90%
3.142	Consulting - Bookkeeping	\$45	\$90	\$1,500	\$0	\$1,410	\$1,500	6%
3.143	Consulting - Legal	\$0	\$641	\$6,000	\$0	\$5,359	\$6,000	11%
3.144	Consulting - Eng. & Tech.	\$0	\$0	\$30,000	\$15,000	\$45,000	\$45,000	0%
3.150	Storm Sewer Utility	\$215	\$1,255	\$15,000	\$0	\$13,745	\$15,000	8%
3.160	Training (staff/board)	\$0	\$7,800	\$13,250	\$0	\$5,450	\$13,250	59%
3.170	Misc. & mileage	\$123	\$377	\$6,300	\$0	\$5,923	\$6,300	6%
3.191	Administration - staff	\$47,105	\$139,426	\$422,353	\$0	\$282,927	\$422,353	33%
3.192	Employer Liability	\$11,860	\$39,745	\$122,428	\$0	\$82,683	\$122,428	32%
3.2	Monitoring and Studies							
3.210	Lake and Creek lab analysis	\$0	\$0	\$18,000	\$0	\$18,000	\$18,000	0%
3.220	Equipment	\$741	\$856	\$3,000	\$1,000	\$3,144	\$4,000	21%
3.230	Wetland assessment & management	\$0	\$0	\$0	\$10,000	\$10,000	\$10,000	0%
3.240	Watershed planning /special study	\$0	\$0	\$10,000	\$5,000	\$15,000	\$15,000	0%
3.3	Education and Outreach							
3.310	Public Education	\$7	\$2,007	\$6,000	\$0	\$3,993	\$6,000	33%
3.320	Marketing	\$848	\$2,279	\$15,000	\$9,500	\$22,221	\$24,500	9%
3.330	Community Blue Ed Grant	\$0	\$0	\$8,000	\$0	\$8,000	\$8,000	0%
<i>Total Core functions: Ops, Monitoring, Education</i>		<i>\$66,389</i>	<i>\$217,015</i>	<i>\$754,883</i>	<i>\$40,500</i>	<i>\$578,368</i>	<i>\$795,383</i>	<i>27%</i>
Capital Improvement Projects and Programs								
3.4	Subwatershed Activity							
3.410	Gem Lake	\$0	\$0	\$15,000	\$10,000	\$25,000	\$25,000	
3.420	Lambert Creek	\$0	\$2,083	\$55,000	\$0	\$52,917	\$55,000	4%
3.421	Lambert Lake Loan	\$0	\$0	\$38,568	\$0	\$38,568	\$38,568	0%

3.425	Goose Lake	\$3,531	\$12,006	\$92,500	\$0	\$80,494	\$92,500	13%
3.430	Birch Lake	\$0	\$0	\$20,000	\$0	\$20,000	\$20,000	0%
3.440	Gilf Black Tam Wilk Amelia	\$13,696	\$41,504	\$157,500	\$43,000	\$158,996	\$200,500	21%
3.450	Pleasant Charley Deep	\$0	\$0	\$48,000	\$30,000	\$78,000	\$78,000	0%
3.460	Sucker Vadnais	\$287	\$1,857	\$35,000	\$28,000	\$61,143	\$63,000	3%
3.48	Programs							
3.480	Soil Health Grant	\$0	\$78	\$8,000	\$0	\$7,922	\$8,000	1%
3.481	Landscape 1	\$0	\$0	\$30,000	\$6,263	\$36,263	\$36,263	0%
3.482	Landscape 2/BWSR WBF	\$0	\$938	\$35,000	\$36,636	\$70,698	\$71,636	1%
3.483	Project Research & feasibility	\$0	\$0	\$5,000	\$0	\$5,000	\$5,000	0%
3.485	Facilities Maintenanc/ Pub. Ditch Main.	\$455	\$2,692	\$90,000	\$37,600	\$124,908	\$127,600	2%
3.5	Regulatory							
3.510	Engineer Plan review	\$0	\$0	\$5,000	\$0	\$5,000	\$5,000	0%
	<i>Total CIP & Program</i>	\$17,969	\$61,158	\$634,568	\$191,499	\$764,909	\$826,067	7%
	Total of Core Operations & CIP	\$84,358	\$278,173	\$1,389,451	\$231,999	\$1,343,277	\$1,621,450	17%

Fund Balance	3/1/2023	4/1/2023
4M Account	\$1,002,779	\$927,289
4M Plus Savings	\$230,027	\$230,942
Total	\$1,232,806	\$1,158,231

Restricted funds		4/1/2023
Mitigation Savings		\$21,014
Term Series		\$0

Vadnais Lake Area Water Management Organization
Check Detail
March 9 through April 12, 2023

2:45 PM
04/04/2023

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Check	eft	03/09/2023	US Bank		Checking - 1987		-45.10
				3.142 · Bookkeeping help		-45.10	45.10
TOTAL						<u>-45.10</u>	<u>45.10</u>
Check	eft	03/20/2023	further		Checking - 1987		-6.00
				Insurance Benefit		-6.00	6.00
TOTAL						<u>-6.00</u>	<u>6.00</u>
Check	eft	04/01/2023	Reliance Standard		Checking - 1987		-312.17
				Insurance Benefit		-91.50	91.50
				Insurance Benefit		-220.67	220.67
TOTAL						<u>-312.17</u>	<u>312.17</u>
Check	5528	04/12/2023	Dawn Tanner		Checking - 1987		-73.75
				3.170 · Misc. & mileage		-73.75	73.75
TOTAL						<u>-73.75</u>	<u>73.75</u>
Check	5529	04/12/2023	Nicholas Voss		Checking - 1987		-50.01
				3.170 · Misc. & mileage		-36.03	36.03
				3.320 · Marketing		-13.98	13.98
TOTAL						<u>-50.01</u>	<u>50.01</u>
Check	5530	04/12/2023	Brian Corcoran		Checking - 1987		-82.85
				3.170 · Misc. & mileage		-13.10	13.10
				3.220 · Equipment		-69.75	69.75
TOTAL						<u>-82.85</u>	<u>82.85</u>
Check	5531	04/12/2023	Metro - Inet		Checking - 1987		-1,439.00
				IT Support		-1,439.00	1,439.00
TOTAL						<u>-1,439.00</u>	<u>1,439.00</u>
Check	5532	04/12/2023	Houston Engineering, Inc		Checking - 1987		-13,696.50
				Wilk 319 cash match \$182,137		-13,696.50	13,696.50
TOTAL						<u>-13,696.50</u>	<u>13,696.50</u>
Check	5533	04/12/2023	Barr Engineering Co		Checking - 1987		-3,013.58

			Oak Knoll	-1,985.08	1,985.08
			Oak Knoll	-1,028.50	1,028.50
TOTAL				<u>-3,013.58</u>	3,013.58
	Check	5534	04/12/2023 Anoka County	Checking - 1987	-215.00
			3.150 · Storm Sewer Utility	-215.00	215.00
TOTAL				<u>-215.00</u>	215.00
	Check	5535	04/12/2023 Kennedy & Graven, Chartered	Checking - 1987	-972.90
			Oak Knoll	-517.50	517.50
			3.485 · Facilities & Maintenance	-455.40	455.40
TOTAL				<u>-972.90</u>	972.90
	Check	5536	04/12/2023 CliftonLarsonAllen	Checking - 1987	-1,785.00
			3.141 · Audit	-1,785.00	1,785.00
TOTAL				<u>-1,785.00</u>	1,785.00
	Check	5537	04/12/2023 City of Vadnais Heights	Checking - 1987	-2,114.41
			Rent	-1,715.00	1,715.00
			Phone/Internet/Machine Overhead	-305.00	305.00
			Postage	-38.70	38.70
			Copies	-55.71	55.71
TOTAL				<u>-2,114.41</u>	2,114.41
	Check	5538	04/12/2023 City of White Bear Lake	Checking - 1987	-58,646.60
			Payroll	-47,104.91	47,104.91
			Administration FICA	-3,484.13	3,484.13
			Administration PERA	-3,532.86	3,532.86
			Insurance Benefit	-4,479.78	4,479.78
			Admin payroll processing	-44.92	44.92
TOTAL				<u>-58,646.60</u>	58,646.60
	Check	5539	04/12/2023 FastSigns	Checking - 1987	-246.87
			3.320 · Marketing	-75.47	75.47
			3.320 · Marketing	-171.40	171.40
TOTAL				<u>-246.87</u>	246.87
	Check	5540	04/12/2023 HDR Engineering, Inc.	Checking - 1987	-587.00
			3.320 · Marketing	-587.00	587.00
TOTAL				<u>-587.00</u>	587.00

Vadnais Lake Area Water Management Organiz:
Profit & Loss
March 9 through April 12, 2023

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04/04/2023

Cash Basis

Mar 9 - Apr 12, 23

Ordinary Income/Expense	
Income	
5.1 · Income	
5.13 · Interest	4,754.22
Total 5.1 · Income	<u>4,754.22</u>
Total Income	<u>4,754.22</u>
Gross Profit	<u>4,754.22</u>
Expense	
3.1 · Administrative/Operations	
3.110 · Office	
Copies	55.71
Phone/Internet/Machine Overhead	305.00
Postage	38.70
Rent	1,715.00
Total 3.110 · Office	<u>2,114.41</u>
3.120 · Information Systems	
Hardware	107.17
IT Support	1,439.00
Total 3.120 · Information Systems	<u>1,546.17</u>
3.141 · Audit	1,785.00
3.142 · Bookkeeping help	45.10
3.150 · Storm Sewer Utility	215.00
3.170 · Misc. & mileage	122.88
3.191 · Employee Payroll	
Payroll	47,104.91
Total 3.191 · Employee Payroll	<u>47,104.91</u>
3.192 · Employer Liabilities	
Admin payroll processing	44.92
Administration FICA	3,484.13
Administration PERA	3,532.86
Insurance Benefit	4,797.95
Total 3.192 · Employer Liabilities	<u>11,859.86</u>
Total 3.1 · Administrative/Operations	<u>64,793.33</u>
3.2 · Monitoring and Studies	
3.220 · Equipment	741.39
Total 3.2 · Monitoring and Studies	<u>741.39</u>
3.3 · Education and Outreach	
3.310 · Public Education	7.00
3.320 · Marketing	847.85
Total 3.3 · Education and Outreach	<u>854.85</u>
3.4 · Capital Imp. Projects/Programs	
3.425 · Goose Lake	

Oak Knoll	3,531.08
Total 3.425 · Goose Lake	3,531.08
3.440 · Gilfillan Black Tamarack Wilkin	
Wilk 319 cash match \$182,137	13,696.50
Total 3.440 · Gilfillan Black Tamarack Wilkin	13,696.50
3.460 · Sucker Vadnais	287.02
Total 3.4 · Capital Imp. Projects/Programs	17,514.60
3.48 · Programs	
3.485 · Facilities & Maintenance	455.40
Total 3.48 · Programs	455.40
Total Expense	84,359.57
Net Ordinary Income	-79,605.35
Net Income	-79,605.35

Vadnais Lake Area Water Management Organization
Custom Transaction Detail Report
 February 1 through April 1, 2023

2:40 PM

04/04/2023

Accrual Basis

Type	Date	Num	Name	Memo	Account	Clr	Split	Amount	Balance
Feb 1 - Apr 1, 23									
Credit Card Charge	02/02/2023		Google*SVCAPPS_VLAWM		US Bank CC	√	WEB	42.00	42.00
Credit Card Charge	02/09/2023		Amazon.com	laptop memory - lauren	US Bank CC	√	Hardware	27.98	69.98
Credit Card Charge	02/09/2023		adobe *photography plan		US Bank CC	√	Software	9.99	79.97
Credit Card Charge	02/09/2023		MAWD	2023 MAWD Legislative Event Phil	US Bank CC	√	3.160 · Training (staff/board)	38.77	118.74
Transfer	02/20/2023			Funds Transfer	US Bank CC	√	Checking - 1987	-507.28	-388.54
Credit Card Charge	02/27/2023		Adobe "Creative Cloud		US Bank CC	√	Software	32.20	-356.34
Credit Card Charge	03/02/2023		Google*SVCAPPS_VLAWM		US Bank CC	√	WEB	42.00	-314.34
Credit Card Charge	03/10/2023		CN Labs	YSI diagnostics	US Bank CC		3.220 · Equipment	651.64	337.30
Credit Card Charge	03/23/2023		Prairie Restorations	seed for E. Vadnais resto.	US Bank CC		3.460 · Sucker Vadnais	287.02	624.32
Credit Card Charge	03/24/2023		Prairie Moon Nursery	seed for E. Vadnais resto.	US Bank CC		3.220 · Equipment	20.00	644.32
Credit Card Charge	03/27/2023		POND5	picture of salamander	US Bank CC		3.310 · Public Education	7.00	651.32
Credit Card Charge	03/29/2023		CDW Government	phil laptop battery	US Bank CC		Hardware	107.17	758.49
								758.49	758.49
Feb 1 - Apr 1, 23									

TEC Report to the Board April 2023

Programs & Projects	Effort Level	Completion Date	Comments					
	LOW							
	MED							
	HIGH							
Projects				Administration & Operation				
319 Biochar			Monitoring starting spring 2023.	Audit		2022/2023	2022 audit has started. Anticipate Audit will be considered by Board at the April meeting.	
Oak Knoll Pond/Wood Lake		ongoing	Temporary easements received by VLAWMO. Feasibility study to be completed for April Board for Spent Lime study. Resolution will be provided to Board with recommended actions.	Budget		for 2024 budget	Board Subcommittee discussed long range project budgeting on March 28. Presentation and discussion anticipated at April Board meeting regarding long range project budget planning.	
Public Ditch Maintenance		ongoing	Drainage inspections complete, working on report.	Personnel /HR		ongoing	Staff continue to pursue professional development per their approved training plans.	
MPCA 319 /Wilkinson Lake BMP		2021-24	Partner coordination continues. Permitting nearly complete; discussions continue with City for final remaining permits. HEI will provide final plans and specs to the Board for April.	SSU		ongoing	2023 SSU certifications submitted to Ramsey and Anoka County.	
Pleasant Lake Carp Management		2022-28	Field monitoring underway, permits in, and site prep will begin once ice-out occurs; Carp Solutions is preparing for spring removal.	Strategic /watershed planning		2023	SLMP/SLMRs now complete for each lake. Updates will continue annually to maintain current technical information.	
Programs								
City/Township MS4		April-June	Focus on IDDE inspection Minimum control Measure 3 for spring 2023. Spring workshop promotion and watershed communication print outs complete, including the 2023 "Watershed at a Glance" to supplement MS4 Minimum Control Measure 1-2.	FINANCIAL SUMMARY as of 4/1/2023				
Education/Outreach		Feb-May	Supporting communications and signage developing for Whitaker Pond Biochar, Spent Lime at Oak Knoll Pond, Vadnais-Sucker Park Restoration, and Westfield Park Bioswale. Partnership continuing with City of White Bear Lake, WBL Rotatory, and Birch Lake Elementary to provide education programming in conjunction with WB Rotary Park restoration (cost-share).	4M Account (1.10)	4M Plus (1.23)	Total		
Website		Feb-May	New groundwater web page posted, weekly maintenance proceeding.	\$927,289	\$230,942	\$1,158,231		
WAV		April-June	MN Water Steward training occurring with staff assistance from Jan-May '23. Spring planning meeting in progress. Focus on mini tour opportunities at select cost-share highlight sites.					
Cost Share & BWSR WBIF		ongoing	One potential Landscape Level 1 grant application in progress. Cost share site visits are starting up with snowmelt and are expected to increase in number. New site visit packets will be used. Discussion with White Bear Lake School District on potential cost share opportunities. BWSR WBIF reporting system recently updated. Staff learning new reporting system and continuing to consider potential projects for the grant.					
GIS		ongoing	Completed maps for the Westfield Park bioswale sign. Updating the online GIS viewer as needed.					
Monitoring		ongoing	starting 2023 season prep.					
WCA		ongoing	Administering WCA as needed.					

Budget Summary	Actual Expense YTD	2023 Budget "working"	Remaining in Budget	% YTD
Operations	\$217,015	\$795,383	\$578,368	27%
CIP	\$61,158	\$826,067	\$764,909	7%
Total	\$278,173	\$1,621,450	\$1,343,277	17%

TEC Staff Memo – April 12, 2023

IV. Administration & Operations

A. Financial Report for April and Authorization for Payment

Please find the April financial report and authorization to pay bills in the ePacket for review and approval.

B. April TEC Report to the Board

Please find the April TEC report to the Board attached in the ePacket for review and approval.

C. Discussion on TEC representative on 2024 budget subcommittee.

The VLAWMO Board has traditionally requested that a TEC representative attend the annual budget subcommittee meeting held in late May /Early June. TEC Chair Jesse Farrell has been the TEC rep. to the subcommittee meeting over the last several years. Staff requests discussion on this item given this subcommittee meeting will likely need to be scheduled before the next TEC meeting on May 10 meeting.

V. Programs

A. 2022 Annual Report Update

The 2022 Annual Report minus finance pages was approved by the VLAWMO Board of Directors (BOD) at the February 28th, 2023 BOD meeting. This approval granted staff the ability to add the financial information to pages 34-35 when it becomes available with the completion of the 2022 audit. The audit will be presented at the April BOD meeting and will provide the finance information for pages 34-35. Once complete the 2022 Annual Report will be submitted to the Board of Water and Soil Resources per State statute requirement. Staff will provide a brief preview of the 2022 Annual Report during the April TEC meeting. An excerpt is also included in the April TEC packet, links to complete documents listed below.

2022 Annual Report:

https://www.vlawmo.org/index.php/download_file/4434/

2022 Water Monitoring Report:

https://www.vlawmo.org/index.php/download_file/4401/

B. Education update: Spring workshops, prints, website

Spring programming is continuing with education offerings to the public. Staff will provide an update on recent workshops from 2023 as well as two additional upcoming workshops. The 2022 Watershed at a Glance, 2022 Water Monitoring Summary, and a BlueThumb native plant guide have been printed and is being dispersed to City and Township offices. Progress continues for the VLAWMO website renovation and is currently moving from a wire frame to a mock-up to be reviewed in April-May. A new groundwater web page is being created to serve as a foundation for future groundwater related programs and outreach.

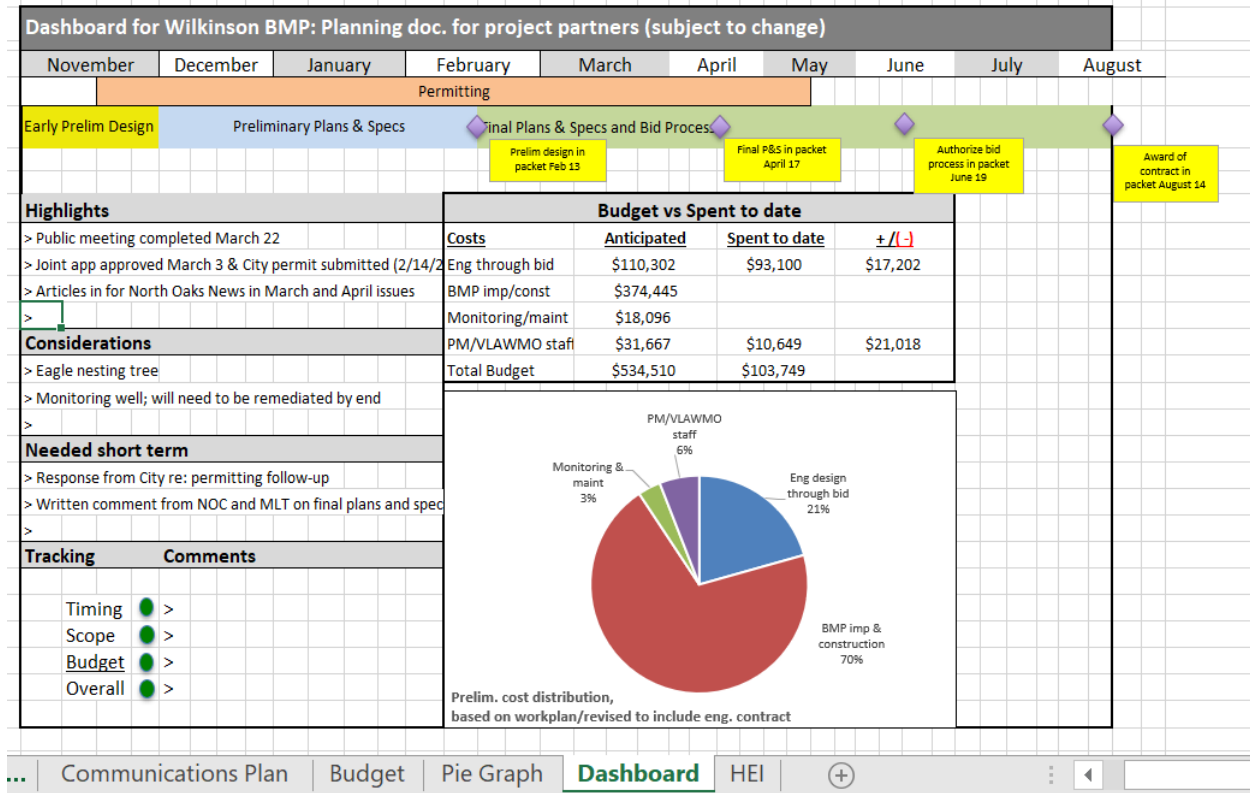
VI. Projects

A. Wilkinson BMP/319 update

Since the March TEC meeting, Houston has continued developing the design and advancing to completed plans and specs. Final plans and specs are planned for review and authorization at the April VLAWMO Board meeting. Draft Plans and specs will be shared to the extent they are available, along with an update regarding anticipated bid process and timing, at the May TEC meeting.

Permitting is complete (WCA and USACE), except for final review and permitting by the City of North Oaks. The City and its engineering team have provided an initial review and comments. HEI is working with the City to complete final review and permitting.

A project update article was published in the April issue of North Oaks News and included the 60% design. A community meeting was held on March 22 at 7:00 pm. HEI and VLAWMO staff presented at this meeting and responded to questions/comments from meeting attendees.



B. Spent Lime Oak Knoll Pond/Wood Lake update

The project team (VLAWMO staff, City of WBL staff, and Barr Engineering) has completed the temporary easement effort for spent lime application. Following mailings and communication with residents living around the pond/lake, VLAWMO received 10 easements, out of 23, granting temporary access for the possible project. With those easements completed, the project engineer has deemed that there is sufficient access for the project to occur at a cost-effective price and with full coverage to the pond. The project engineer is completing the social and financial feasibility which will include a cost estimate, prior to requesting quotes, and a cost for final preparation of project plans and specs. A packet will be presented to the Board for requested authorization at the April VLAWMO Board meeting. These materials will be presented to the TEC at the May meeting to the extent they are ready/available. They are still in process at the time of TEC packet preparation.

C. Pleasant Lake carp removal update

Project coordination is underway for a spring Common carp removal in the Pleasant Lake system. Carp Solutions has secured the necessary permits from MN DNR for the temporary barrier and removal. VLAWMO staff, with assistance from UMN community-engaged learning students, have been checking carp locations with the remaining functioning active telemetry tags. We are looking forward to another season of carp removals with Carp Solutions.

D. Birch Lake AIS removal MN DNR grant/BLID partnership update

Project coordination is underway for the second year of Eurasian watermilfoil and Curly-leaf pondweed removal in Birch Lake in partnership with BLID. The effort is part of a 2-year AIS removal grant from MN DNR. RWSWCD will be working with VLAWMO staff to conduct the required pre/post delineations. MN DNR will approve the permit for this work when they receive the pre delineation. Hand removal is expected again this year, working with Dive Guys, LLC.

E. Vadnais-Sucker Lakes Regional Park Restoration Update

Minnesota Native Landscapes (MNL) completed the first phase of invasive species removal work in the upland sections of Vadnais-Sucker Lakes Regional Park as part of the restoration project. This area was almost 20 acres in size. MNL will be returning in the fall for the first phase of follow up foliar treatment. They will begin cutting the next area of the project the following spring, which will be within wetland areas. Below is a photo of the progress so far:



F. East Vadnais Lake Subwatershed Resiliency Study Update

In January, staff had applied for a MPCA Community Planning Grant for Stormwater Resiliency to complete a study to evaluate opportunities in the East Vadnais Lake subwatershed to reduce chronic flooding and stormwater volume, improve water quality, and protect drinking water for a more resilient subwatershed in the face of climate change. The MPCA got back to us on our application status last month and we unfortunately were not chosen for the grant. As expected, the grant was highly competitive; the MPCA received applications asking for \$1.3 million, but the MPCA only had \$395,000 available for all of the State.

Staff had partnered with the City of Vadnais Heights, Ramsey County, and Saint Paul Regional Water Services on the application to the MPCA. After receiving the MPCA's response, staff discussed the proposed resiliency study with the three partners and they provided initial support to continue moving forward with the study without the grant, using local match funds. Staff have put together a draft MOU and Request for Services for partners to review. Staff are anticipating to have complete drafts ready for the next Board meeting on April 26th and will provide an update at the next TEC meeting.

- VII. Commissioner Reports**
- VIII. NOHOA**
- IX. Ramsey County Soil & Water Conservation Division**
- X. St. Paul Regional Water Services**
- XI. Public Comment**
- XII. Next Meetings: TEC: May 10th Board Meeting: April 26th**
- XIII. Adjourn**

Water Monitoring

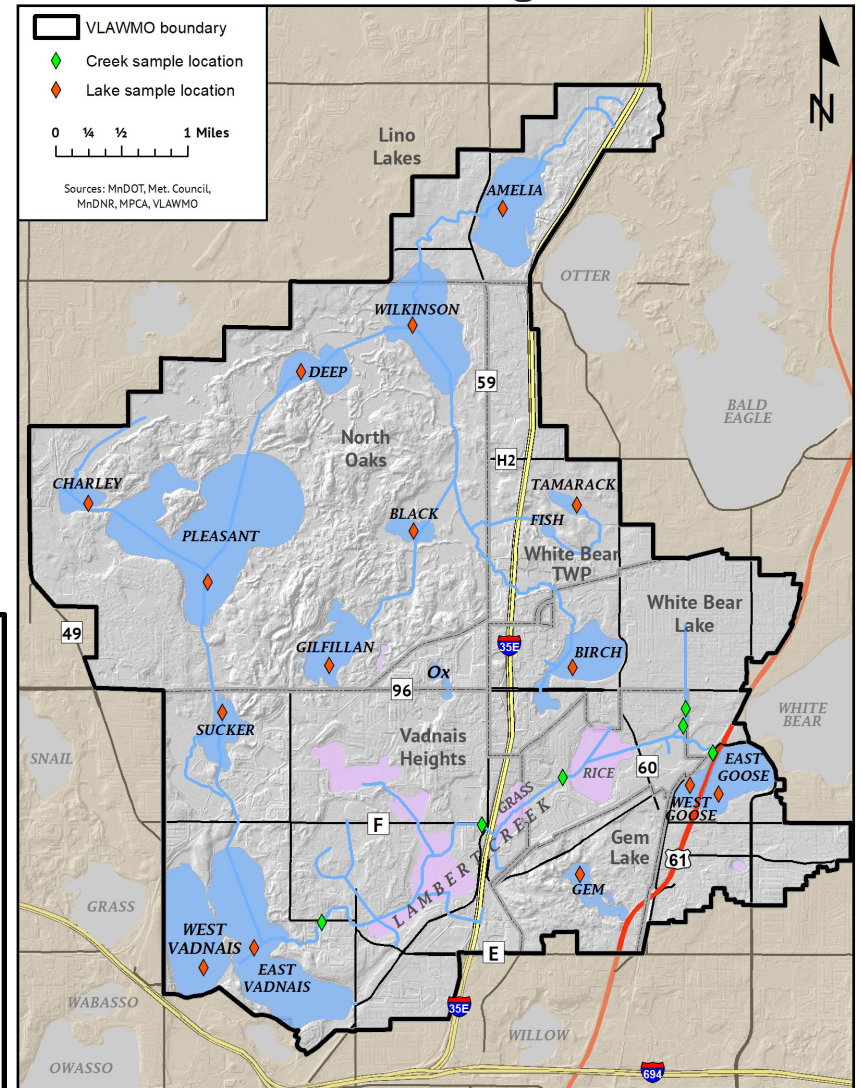
INTRODUCTION

VLAWMO's regular water quality monitoring program includes nutrient sampling on 6 Lambert Creek sites, and nutrient sampling on 15 of the Vadnais Lake Area Watershed lakes. Nutrients and pollutants sampled for data include: total phosphorus, chlorophyll-A, soluble-reactive phosphorus, iron, total nitrogen, nitrate, total suspended solids, and chloride. VLAWMO's specialty monitoring programs, such as project BMP's and storm sampling, will continue. See the map of current monitoring locations to the right.

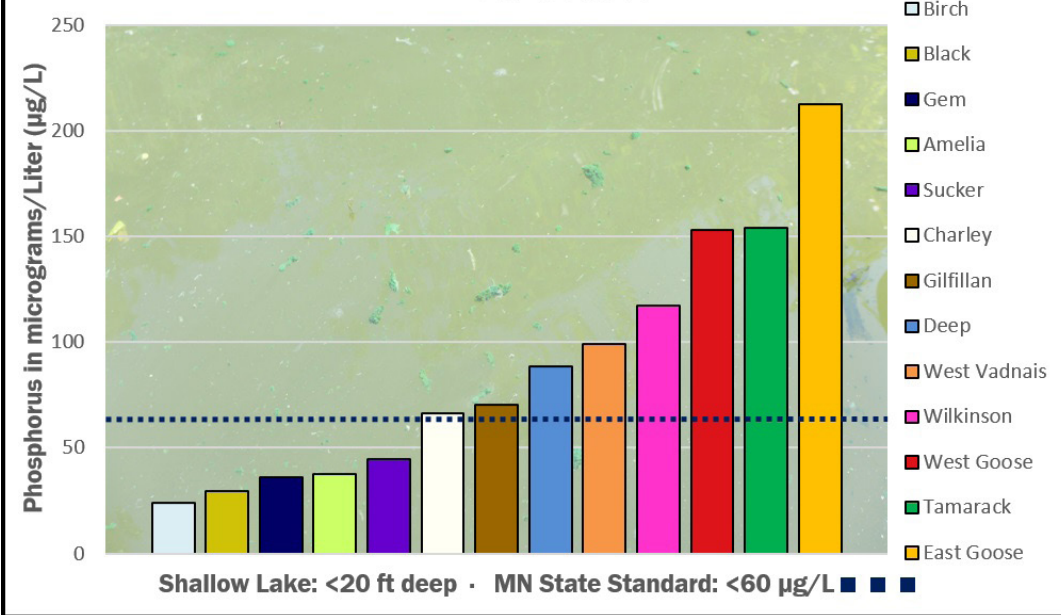
Part of VLAWMO's water monitoring includes rainfall measurements because rainfall and the timing of rainfall are factors that influence water quality. Typically, more precipitation implies more water runoff, which carries more contaminants from the land surface into water bodies.

Lakes are summarized with a grading system called the Carlson Trophic State Index (TSI). This system was developed in the 1970's to calculate average phosphorus, chlorophyll-A, and Secchi disk readings, and generate a summarizing number.

VLAWMO Monitoring Locations



Average Total Phosphorus of VLAWMO Shallow Lakes: 2010-2022



Monitoring results are used to guide local water policies and management, and to help prioritize and locate future water quality projects such as raingardens, underground retention basins, and shoreline restorations.

WATER MONITORING HIGHLIGHTS

Pleasant Lake: Roughly 900 carp (close to 20,000lbs) were removed from Pleasant Lake in 2022. Monitoring in 2023 will help assess the removal's impact on water quality.

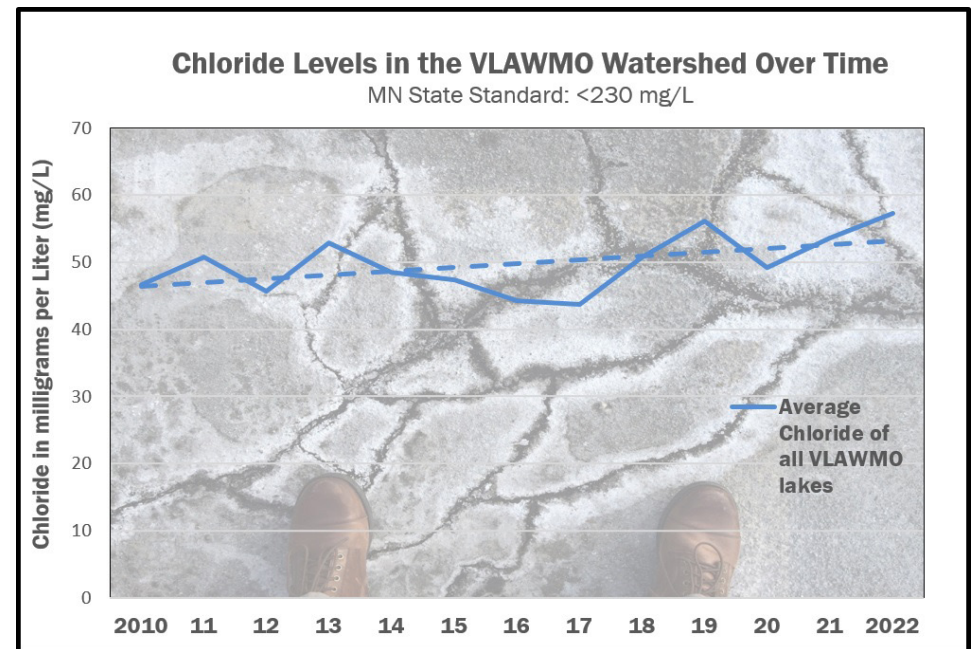
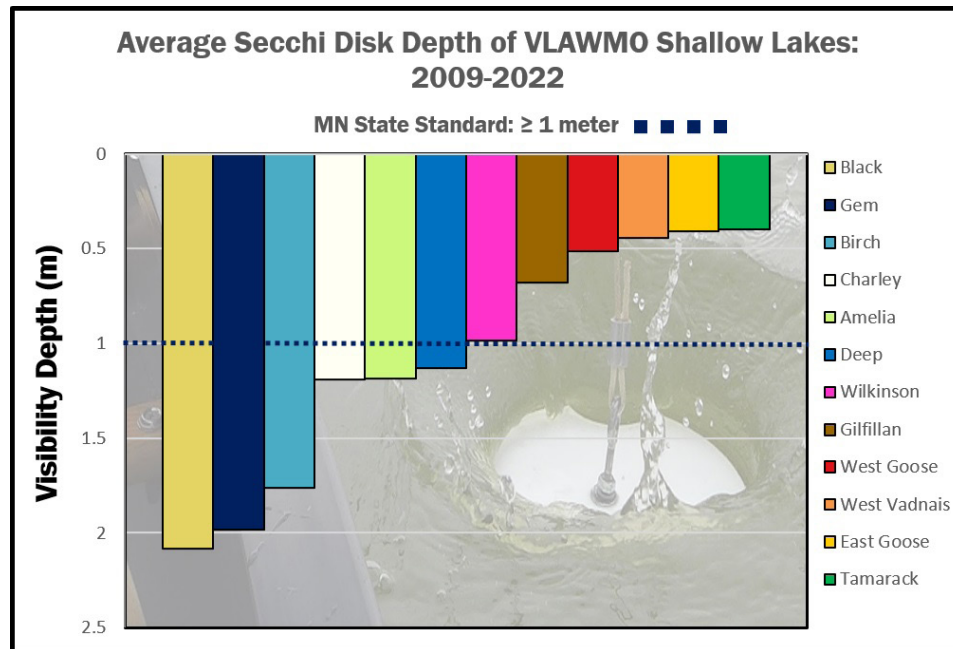
Remote Monitoring Devices: 2022 was the third full year of automated creek flow monitoring. Live information can be found here for the four sites that are remote monitored on the creek. <http://monitormywatershed.org/>

Lambert Creek: Creek flow was extremely low in 2022. Rainfall was 6.91 inches below average for the season. Two of the five monitoring sites were dry for portions of the monitoring season.

Oak Knoll Pond/Wood Lake Spent Lime Demonstration Study: A spent lime feasibility study was done on Oak Knoll pond in White Bear Lake to investigate the feasibility of spent lime as a potential tool for reducing total phosphorus (TP) levels. Preliminary results showed promise in decreasing TP levels after the spent lime applications. Application and monitoring to start in 2023.

Chloride: VLAWMO has been sampling lake chloride for 13 years and while slight rises are documented, there have been no major changes within the lakes. Black Lake has the lowest levels. Birch Lake and East Goose are the highest, which coincides with their proximity to major roads and stormwater drainage. All of the lakes are below the current State standard of 230 mg/L.

Use of Monitoring Data: The VLAWMO monitoring data was used for multiple subwatershed studies and grant applications in 2022 to aid in possible water quality projects moving forward in 2023.



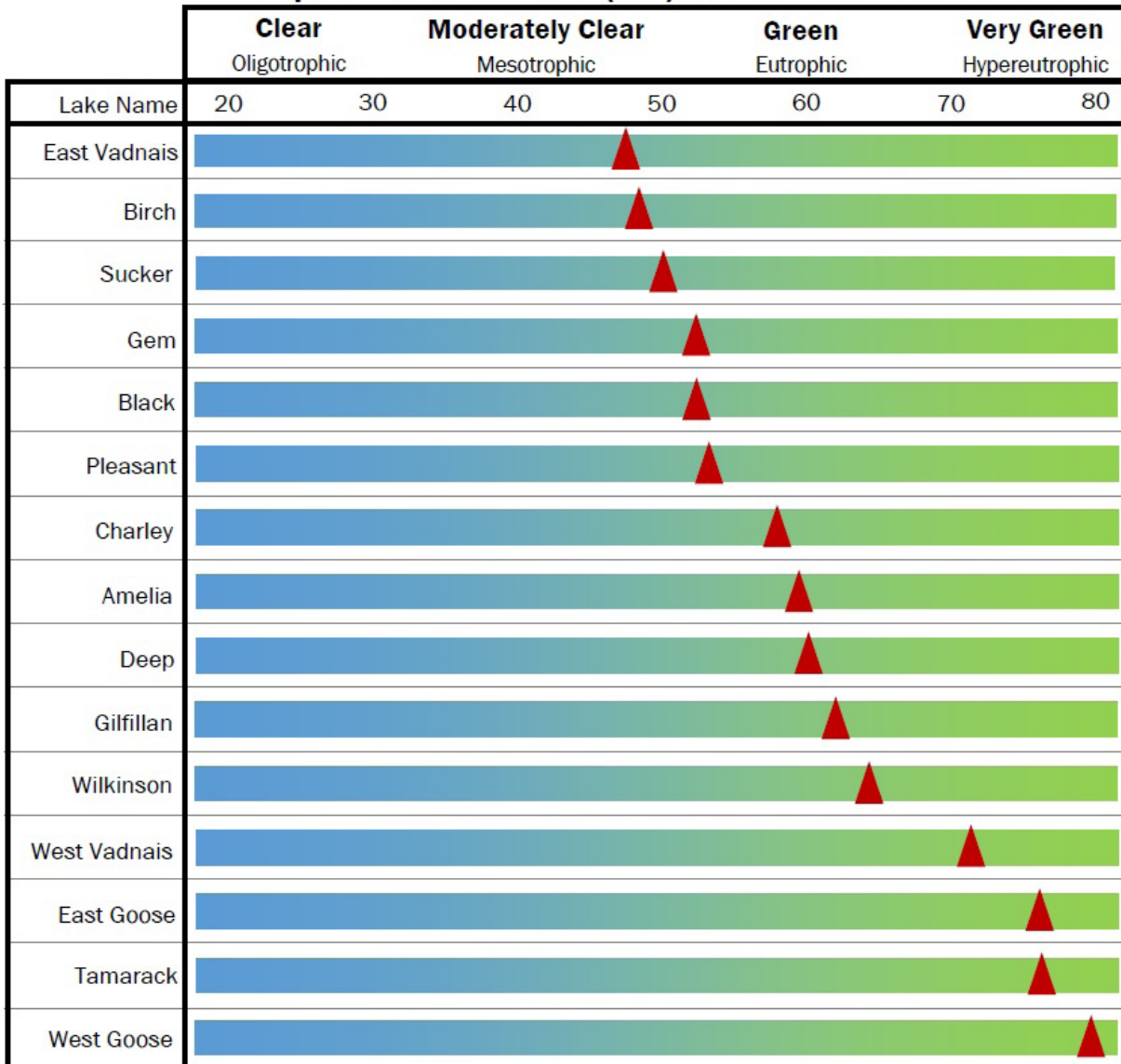
Find this year's complete Monitoring Report and a summary at [VLAWMO.org/resources/reports](https://vlawmo.org/resources/reports)

MONITORING SUMMARY: CONTINUED

STATE OF THE LAKES

VLAWMO uses the Carlson Trophic Status Indicator (TSI) to summarize lake health. TSI is calculated from annual monitoring data by combining total phosphorus, chlorophyll-a, and transparency (Secchi) readings.

Trophic State Indexes (TSI) of VLAWMO Lakes: 2022



A water sample on the shore of East Goose Lake



VLAWMO staff taking a monitoring sample at Birch Lake

Project Highlights

PLEASANT/DEEP LAKE CARP HARVEST

VLAWMO worked with the North Oaks Home Owners' Association (NOHOA), the North Oaks Company, and Carp Solutions to accomplish a common carp harvest in May of 2022. Native to Eastern Europe and brought to the US from Germany in 1877, common carp act as invasive species in North American Lakes. Pleasant Lake is impaired for nutrients, and common carp travel between Pleasant, Deep, Charley, and other downstream lakes through a network of channels.

Through a series of studies and electrofishing sessions with Carp Solutions prior to 2022, staff learned that the carp population was predominately large adults. The absence of young and young adult fish means that removal of these large carp is more likely to result in water-quality improvements than it would in a healthy reproducing population, where reproduction is likely to replace fish removed over time. Ongoing efforts will maintain reductions and detect if successful reproduction occurs.

A total of 916 carp were removed from a barrier set up in a Deep Lake channel during spring/summer 2022. Post-removal surveys were conducted to assess the results on the carp population. It's estimated that the total biomass of all the carp in the lake went from 230 kg/ha to 48.9 kg/ha. Complete removal of all carp is impractical, but studies show that keeping the population below the critical threshold of 100 kg/ha will increase likelihood of achieving the desired water quality results. A full report on the carp harvest can be found at vlawmo.org/projects.



Carp Solutions work on carp harvesting with nets and a barrier at the channel between Deep and Wilkinson Lakes

BRIDGEWOOD PARK RAINGARDEN KICK-OFF

VLAWMO teamed up with the City of Vadnais Heights, the Minnesota Master Gardeners, and Watershed Action Volunteer Gloria Tessier to host a kick-off party for a new raingarden in Bridgewood Park.

Located near the popular pickleball courts, the raingarden was completed in June 2022. It features two curb-cut devices to capture runoff and sediment from the parking lot and street. After stormwater splashes into the "turret" catchments the sediment and other debris drops to the bottom while the water drains out the side. This raingarden and others like it help to restore upland water storage that has been lost in mid-to-late 1900's development. By storing more water upstream, the raingarden also reduces the stormwater volume, excess nutrients, and sediment that flow downstream into Lambert Creek and eventually to East Vadnais Lake.

The raingarden is estimated to store 4,643 bathtubs of stormwater, .47 lbs of total phosphorus, and remove 85 lbs of sediment from Lambert Creek annually. Just 1 lb of phosphorus can create up to 500 lbs of algae - raingardens help keep this key nutrient in the soil and out of the water.

Check out the construction photos and the educational signage posted on-site at vlawmo.org/projects.



VLAWMO staff and Minnesota Master Gardeners at the Bridgewood Park raingarden kick-off

Project Highlights

WHITAKER POND BIOCHAR FILTER

VLAWMO was pleased to complete its first biochar stormwater filter in partnership with White Bear Township and the City of White Bear Lake. Located between Columbia Park and Whitaker Street, the project is funded by a grants from the Minnesota Pollution Control Agency (MPCA) 319 and the Board of Water and Soil Resources (BWSR).

Biochar is a charcoal-like substance made by burning organic material, usually agricultural and forestry wastes. It's commonly used as a soil additive for enhancing soil structure and water retention, but also acts as a filter. This filter is designed to capture the “first flush” after a storm event. This pertains to nutrients and bacteria that wash off parking lots, streets, lawns, and other surfaces in the first several minutes of a rain event. As the water level in the pond rises, the filter takes the high water, slowly seeps it down through its layers (above right) and sends it on its way to Lambert Creek through an underdrain.

Whitaker pond was first constructed in 1996 to improve stormwater storage at the headwaters of Lambert Creek. The pond also provides a strategic location for catching sediment draining in from upstream streets, parking lots, and lawns, reducing the sediment that flows downstream. Lastly, the pond's proximity to Columbia Park allows for large equipment to access the site for maintenance and to periodically dredge sediment from the pond.

Find more info, funding, and photos of the project at vlawmo.org/projects.

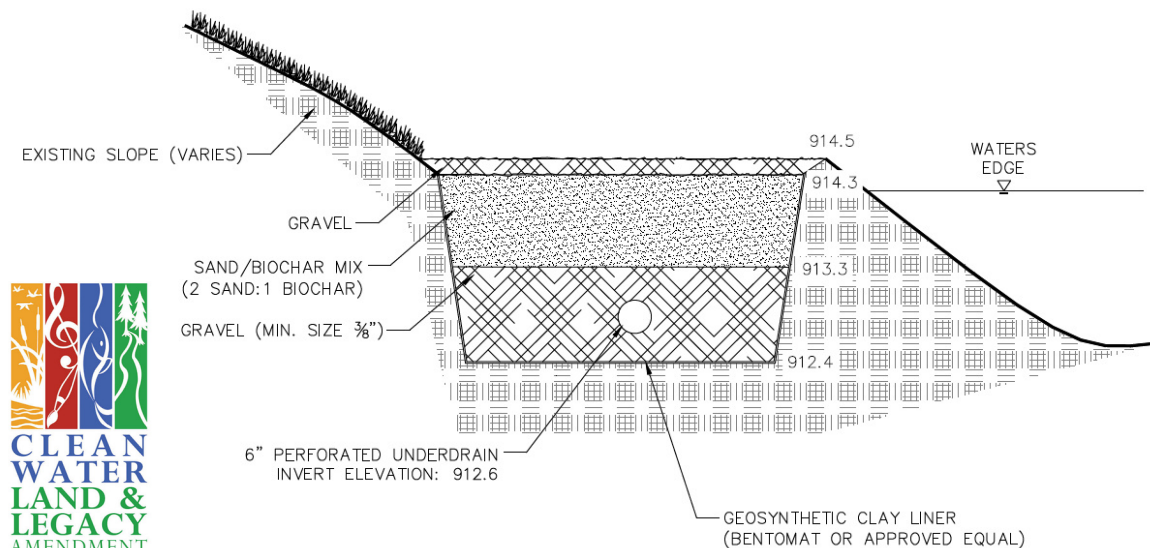


Above: The Whitaker Pond Biochar Filter pictured during construction in October 2022.

Below: Layers of the biochar filter during construction.

Bottom left: Biochar filter cross section diagram.

Image courtesy of SEH.



Project Highlights

HISTORIC TOWN HALL NATIVE PLANTING

The White Bear Lake Area Historical Society (WBLAHS) pioneered a new native planting at the Historic Town Hall located in White Bear Township. The Historical Society secured grant funding from VLAWMO's Soil Health cost-share program, and worked with VLAWMO staff to arrange a planting plan. The Saint Paul Garden Club also contributed grant funds while landscaping and equipment support was provided by a contractor through White Bear Township public works.

The native planting paired well with the mission and goals of the White Bear Lake Area Historical Society. Because the plants are native to the Minnesota mesic prairie region, they provide a demonstration of the plants and habitat that historically dominated the landscape pre-European settlement. Staff from VLAWMO and the Historical Society worked together to interpret this connection and provide educational signage on-site. VLAWMO looks forward to continuing the partnerships started with this project, and is excited to utilize this community icon as a demonstration site for water-friendly landscaping and soil health.



Above: Sandy Law (Saint Paul Garden Club), Dan Jones (White Bear Lake Area Historical Society) and Phil Belfiori (VLAWMO), Katherine Doll Kanne (MN Water Steward), Ed Prudohn (White Bear Township Board of Supervisors), and Joe Reil (White Bear Lawn & Snow) participated in site prep and planting

Left: The newly completed native planting in September 2022



CAPITAL PROJECTS & PROGRAMS

Review of 2022 Work Plan

Project Name	Description	Goal: Going into 2022	Goal: 2022 Result
Wilkinson BMP	A deep water wetland restoration is planned to help improve Wilkinson Lake, an impaired waterbody. Partners in this project include the North Oaks Company, Minnesota Land Trust, and Houston Engineering Inc. Funded by EPA 319 with shared match between VLAWMO and the North Oaks Company.	Continue with design and planning for construction of BMP with project partners.	Design and planning conducted, project ongoing until 2024.
East Goose Lake Adaptive Lake Management (ALM)	Continuing work on East Goose Lake ALM public engagement and possible lake treatment options.	Aquatic vegetation management policy created. Pursue development of ALM plan with partners.	Aquatic vegetation management policy extended. ALM pursued with a focus on spent lime feasibility.
Ditch Maintenance	Maintenance of the main stem of County Ditch 14 according to MN Public Drainage Permit 103E and the 2018 Hydrologic & Hydrology study contracted by VLAWMO with Houston Engineering Inc. (Available at vlawmo.org/waterbodies/lambert-creek).	Continued branch ditch planning with City of Vadnais Heights. Re-survey of completed maintenance projects: Dec, 2020 and Dec, 2021.	Ditch inspection drone survey complete.
Pleasant Lake Carp Removal	Working with WSB, Carp Solutions and NOHOA, establish carp biomass and movement patterns in Pleasant Lake for carp control measures. Removals will be conducted and surveys continued to document results and water-quality improvements.	Carp removal harvest. Stream harvest and biomass monitoring - harvest dependent.	Initial harvest complete. Biomass estimate reevaluated.
West Vadnais Lake Carp Removal	Working with Carp Solutions and Ramsey Washington Metro Watershed District (RWMWD), control carp biomass in West Vadnais Lake and prevent movement from West Vadnais Lake into the Phalen Chain. Initial surveys and biomass estimates were conducted by RWMWD. VLAWMO is partnering on removals, surveys, and electric barriers.	Fish survey, shared with Ramsey Washington Metro Watershed District (RWMWD). Carp monitoring.	Complete. Incomplete - low water conditions and poor accessibility.

Review of 2022 Work Plan



CAPITAL PROJECTS & PROGRAMS

Project Name	Description	Goal: Going into 2022	Goal: 2022 Result
Vadnais-Sucker Lake Regional Park Restoration	28 acres of restoration in Vadnais-Sucker Lakes Regional Park. Removal and treatment of invasive buckthorn and reseeded/ planting with natives with ongoing maintenance. Partners in this project include Great River Greening, Ramsey County Parks, and St. Paul Regional Water Services. Funds provided by the Outdoor Heritage grant program administered by the MN DNR. The grant time frame for this project is 5 years.	Buckthorn removal.	RFP complete. Contractor selected.



CAPITAL PROJECTS & PROGRAMS - GRANTS

Project Name	Description	Goal: Going into 2022	Goal: 2022 Result
Landscape Level 1	Establish relationships and provide grants to property owners within the watershed to install water quality enhancement projects	Fund and install 1 LL1 infiltration projects. Combined annual phosphorus reduction: 1 lb.	2 LL1 projects complete. 1 lb TP/yr reduced.
Landscape Level 2	Assist landowners with implementing larger BMP projects focused on stormwater capture and treatment within the watershed.	Fund 4 LL2 projects with annual phosphorus removal: 2 lbs.	1 LL2 project funded, complete in 2023. 2 lbs TP/yr reduced.
Soil Health Grant	Small projects focused on habitat and shoreline restoration, utilizing native vegetation to promote soil and watershed health.	Fund 4 SHG projects with restored project area: 10,000 ft ² .	8 SHG projects complete. ~12,000 sq ft.
Community Blue Grant	A communication and outreach grant program for projects that relate to water quality. Available to MN Water Stewards, volunteers, and community partners.	1 public education initiative 1 raingarden renovation or service project.	“Good Neighbor Guide” public education initiative complete. Saint Mary’s raingarden renovation complete.



EDUCATION AND OUTREACH

Review of 2022 Work Plan

Project Name	Description	Goal: Going into 2022	Goal: 2022 Result
Community Events	Staff a VLAWMO booth, develop watershed information/brochures, and host public workshops and learning opportunities.	8 community event/workshops. 1 watershed/BMP tour.	8 community events. 1 tour.
Communications	Create and update material and publications for social media, website, seasonal E-news, and local publications. Create and maintain communications on VLAWMO projects and to promote responsible use of water resources.	10+ E-newsletters. Project map and project page facilitation. Yard care and raingarden care calendar. 3 communications items provided to member Cities/Township.	10 E-newsletters. Project map and calendar complete. Complete.
K-12	Provide watershed activities and resources for schools. Assist schools in establishing and maintaining stormwater best management practices (BMP's).	3 school collaborations/yr. 2 school raingarden maintenance activities.	2 school collaborations. 1 school activity.
Citizen Science	Facilitate LeafPack macroinvertebrate monitoring. Facilitate 5 Picture Post photo-monitoring sites with volunteer photo-taking. Pilot Wetland Health Evaluation Program (WHEP) with Tamarack Nature Center partnership.	4+ completed macroinvertebrate LeafPack studies submitted to the Monitor My Watershed Wiki. 3+ photo entries at each picture post. Complete pilot WHEP program and assess results.	2 LeafPacks complete. All picture post entries complete. WHEP complete.
Watershed Action Volunteers (WAV)	The WAV consists of Minnesota Water Stewards (Freshwater), Citizen Advisory Commission (CAC), and volunteers with individual job descriptions.	Complete a "Good Neighbor Guide" for Cities/Township Facilitate public booths (3+).	Complete. 5 public booths.

 **MONITORING PROGRAM**

Review of 2022 Work Plan

Project Name	Description	Goals: Going into 2022	Goals: 2022 Result
Lambert Creek monitoring program	Monitor basic phosphorus, nitrogen, Chlorophyll-A, chloride, and sediment levels at 6 sites along with pH, conductivity and DO at the 3 flumes. Maintain automated flow meter and precipitation gauge at Whitaker. Four remote sensors installed along creek, live updated volume and water levels displayed on line.	Document and evaluate creek water quality.	Data collection complete, see monitoring report.
Lake Level Program	Gilfillan, Birch, Gem & Goose Lake gauges are calibrated in the spring and read up to 11 times during the summer.	Monitor lake levels on 4 targeted lakes in the watershed to track short & long term trends.	Complete.
Lake Monitoring Program	Monitor chemistry of 15 of VLAWMO's lakes for nutrients, turbidity, pH, conductivity, and dissolved oxygen (DO).	Keep water quality record of watershed's lakes. Utilize water quality data for future projects and CIPs.	Data collection complete, see monitoring report.
Chloride Monitoring	Sample lakes and Lambert Creek. Partner with Birch Lake Improvement District (BLID) for additional winter monitoring of Birch Lake.	Check Spring measurements.	Complete.
Biological Monitoring	Volunteer-based macroinvertebrate Leaf Pack monitoring in Lambert Creek, Lambert Lake, and Deep and Charley Lake channels. Volunteer phenology/picture post monitoring at five lake and wetland shoreline sites in the watershed.	Complete 2 Leaf Pack monitoring sessions on Lambert Creek/Lake. Gather photo data from each of the 5 shoreline picture posts sites in the watershed.	2 Leaf Pack monitoring sessions complete. All picture post sites active.

Review of 2022 Work Plan



ADMINISTRATION & REGULATION

	Project Name	Description	Goals: Going into 2022	Goals: 2022 Results
	Budget & Stormwater Utility	Storm sewer rates are based on the adopted budget and certified to the counties for collection.	Continued county participation and budgeting for future years.	Complete.
	Wetland Conservation Act (WCA)	Complete boundary and type & other determinations in consultation with the TEP. Respond to WCA questions.	Continued administration of WCA.	Complete.



SUSTAINABLE LAKE MANAGEMENT REPORTS (SLMRs) AND STUDIES

	Project Name	Description	Goals: Going into 2022	Goals: 2022 Results
	Amelia Lake SLMR Surveys	A Sustainable Lake Management Report (SLMR) is being written according to the 10-year Watershed Plan.	Flowering rush follow-up surveys. Complete Amelia SLMR.	Flowering rush location detected. Complete.

2023 Work Plan

CAPITAL IMPROVEMENT AND MAINTENANCE PROJECTS

Project Name	Description	Goals	Timeline
Wilkinson BMP	A deep water wetland restoration is planned to help improve Wilkinson Lake, an impaired waterbody. Partners in this project include the North Oaks Company, Minnesota Land Trust, and Houston Engineering Inc. Funded by EPA 319 with shared match between VLAWMO and the North Oaks Company.	Continue with design and planning for construction of BMP with project partners.	Ongoing 2023-2024.
Vadnais/Sucker Regional Park Habitat Restoration	28 acres of restoration in Vadnais-Sucker Lakes Regional Park. Removal and treatment of invasive buckthorn and reseeding/planting with natives with ongoing maintenance. Partners in this project include Great River Greening, Ramsey County Parks, and St. Paul Regional Water Services. Funds provided by the Outdoor Heritage grant program administered by the MN DNR. The grant time frame for this project is 5 years.	Minimum 28 acres restoration completed. On-site public outreach event.	Ongoing 2023-2024. Ongoing maintenance through 2025.
Oak Knoll Pond Spent Lime Study	Financial and social feasibility study with Barr Engineering to determine potential for scaling up small pond treatments to a large pond.	Report development and consideration, pond access pursued with property owners around pond.	Ongoing 2023.
Groundwater Conservation Pilot Project	Pilot program in partnership with member communities to install smart irrigation controllers on public properties with high groundwater usage. Evaluate effectiveness for providing groundwater conservation benefits.	Complete 1 pilot project.	Spring 2023-2024.

2023 Work Plan


GRANT PROGRAMS

Project Name	Description	Goals	Timeline
Rainbarrel Grant	Reimburse 50% of a rainbarrel purchase (up to \$200) with proof of purchase.	Fund 3 rainbarrel reimbursements.	Ongoing.
Landscape Level 1	A grant program that reimburses landowners for installing projects that improve water quality and preserve groundwater.	Fund at least 1 LL1 infiltration project.	Ongoing.
Landscape Level 2	A grant program that supports partnership projects to install large-scale projects that improve water quality, increase flood storage, conserve groundwater, or provide regional benefits.	Fund 2 LL2 projects.	Ongoing.
Soil Health Grant	A grant program that reimburses landowners for installing small-scale practices that improve water quality and soil health with a focus on native plant restorations.	Fund 5 SHG projects.	Ongoing.
Community Blue Grant	A communication and outreach grant program for projects that relate to water quality. Available to MN Water Stewards, volunteers, and community partners.	1 public education initiative. 1 raingarden renovation or service project.	Ongoing.



PUBLIC EDUCATION AND OUTREACH

2023 Work Plan

Project Name	Description	Goals	Timeline
Watershed Action Volunteers (WAV)	The WAV consists of Minnesota Water Stewards (Freshwater), Citizen Advisory Commission (CAC), and volunteers with individual job descriptions.	Complete 1 Minnesota Water Steward Capstone Project Hold spring and fall WAV/CAC meetings Facilitate public booths (3+).	June-Oct. March-Oct. April-Sept.
Community Engaged Learners (CEL)	The Community Engaged Learning (CEL) Partnership with the U of M includes habitat improvement projects such as buckthorn removal, prairie and native woodland establishment, wooded wetland restoration, and various wildlife and macroinvertebrates monitoring.	Complete 8 or more field work days in habitat management and site maintenance.	Ongoing.
Workshops	Educate residents on watershed processes, raingarden and native plant function, smart salting, and VLAWMO grant programs.	4 residential workshops (raingardens, etc.). 1 municipal staff workshop (smart salting, etc.).	Spring-Fall.
Community Events	Staff a VLAWMO booth, develop watershed information, brochures, and resources for community events.	5 community events. 1 watershed/BMP tour.	Spring-Summer.
Communications	Create and update material and publications for social media, website, seasonal E-news, and local publications. Create and maintain communications on VLAWMO projects and to promote responsible use of water resources.	10+ E-newsletters. Website renovation. 3 communications items provided to member Cities/Township.	Winter-Fall.
K-12	Provide watershed activities and resources for schools. Assist schools in establishing and maintaining stormwater best management practices (BMP's).	1 school collaboration/yr. 2 school raingarden maintenance activities.	Ongoing.

2023 Work Plan

Project Name	Description	Goals	Timeline
Citizen Science	Facilitate LeafPack macroinvertebrate monitoring. Facilitate 5 Picture Post photo-monitoring sites with volunteer photo-taking. Pilot Wetland Health Evaluation Program (WHEP) with Tamarack Nature Center partnership.	2+ completed macroinvertebrate LeafPack studies submitted to the Monitor My Watershed Wiki. 2+ photo entries at each picture post. Facilitate WHEP Program with Tamarack Nature Center.	April- November.



MONITORING PROGRAM

Project Name	Description	Goals	Timeline
Lambert Creek monitoring program	Monitor basic phosphorus, nitrogen, Chlorophyll-A, chloride, and sediment levels at 6 sites along with pH, conductivity and DO at the 3 flumes. Maintain automated flow meter and precipitation gauge at Whitaker. Four remote sensors installed along creek, live updated volume and water levels displayed on line.	Document and evaluate creek water quality.	Monitoring May-Sept.
Lake Level program	Gilfillan, Birch, Gem & Goose Lake gauges are calibrated in the spring and read up to 11 times during the summer.	Monitor lake levels on 4 targeted lakes in the watershed to track short & long term trends.	Monitoring May-Sept.
Chloride measurements	Sample lakes and Lambert Creek during spring snow melt and ice out.	Check Spring measurements	Spring.
Lake monitoring program	Monitor chemistry of 15 of VLAWMO's lakes for nutrients, turbidity, pH, conductivity, and dissolved oxygen (DO).	Keep water quality record of watershed's lakes. Utilize water quality data for future projects and CIPs.	Monitoring May-Sept.



ADMINISTRATION & REGULATION

Project Name	Description	Goals	Timeline
Budget & Stormwater Utility	Storm sewer utility rates are based on the adopted budget and certified to the counties for collection.	Continued county participation and budgeting for future years.	Ongoing.
Wetland Conservation Act (WCA)	Complete boundary and type & other determinations in consultation with the TEP. Respond to WCA questions.	Continued administration of WCA.	Ongoing.



SUSTAINABLE LAKE PLAN REPORTS (SLMRs) AND STUDIES

Project Name	Description	Goals	Timeline
Tamarack Lake SLMR update	Update previous SLMPs with new survey, monitoring, and other relevant information. Post on the VLAWMO website.	Complete update and display on VLAWMO website.	Summer.
Gem Lake SMLR update	Update previous SLMPs with new survey, monitoring, and other relevant information. Post on the VLAWMO website.	Bathymetry survey. Aquatic macrophyte survey. Display on VLAWMO website.	Summer.