

#### VLAWMO TECHNICAL COMMISSION MEETING

#### 8:15 AM November 13, 2024

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

- Action items:
- I. Call to Order 8:15 am Chair Tessier
- II. Approval of Agenda
- III. Approval of Minutes (October 9, 2024)
- IV. Administration & Operations
  - A. November Financial Report and Consider Authorization for Payment Phil Pg. 6
  - B. Consider Moving Regular TEC Meetings Start Time to 8:15am for All Upcoming TEC + Meeting Days Gloria Pg. 14
  - C. Reminder TEC + Meeting at 9 am Today. TEC + Meeting Packet Information Sent in Separate Email on Nov. 6<sup>th</sup> Phil
  - D. Update on Communication and Outreach Coordinator Position -Phil Pg. 14
- V. Programs Lauren
  - A. Consideration of 2025 Proposed Grant Program Updates Pgs. 14 & 18
- VI. Projects Lauren, Brian, Dawn
  - A. Update on MPCA Grant Application Partnerships with City of Vadnais Heights Pg. 15
  - B. Update on Gully Repair Outfalls Construction Pg. 15
  - C. Update on Tamarack Lake Alum Project Pgs. 16 & 37
  - D. Update on Oak Knoll Spent Lime Interim Report/Memo Pgs. 17 & 43
- VII. Commissioner Reports
- VIII. NOHOA
- IX. Ramsey Soil & Water Conservation Division
- X. St. Paul Regional Water Services
- XI. Public Comment
- XII. Next meetings: TEC: December 11, 2024; Board Subcommittee Meeting: 6:00 p.m. on November 20, 2024; Special Board Meeting 7:00 p.m. on November 20, 2024; Regular scheduled Board Meeting: December 11, 2024.
- XIII. Adjourn

**Upcoming Events: Visit vlawmo.org/events** 

#### Vadnais Lake Area Water Management Organization Technical Commission (TEC) Minutes October 9, 2024 Vadnais Heights City Hall, Council Chambers

800 County Road E East, Vadnais Heights, MN 55127

#### **Commission Members Present:**

Gloria Tessier Gem Lake (GL)

Nick Ousky Vadnais Heights (VH) Susan Miller City of North Oaks (NO)

Terry Huntrods City of White Bear Lake (WBL)

Mike Grochala City of Lino Lakes

Absent: Jami Philip, City of White Bear Township (WBT)

**Others in attendance:** Phil Belfiori, Dawn Tanner, Lauren Sampedro, Brian Corcoran (VLAWMO staff)

#### I. Call to Order

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

#### II. Approval of Agenda

It was moved by Commissioner Grochala and seconded by Commissioner Huntrods to approve the October 9, 2024, TEC agenda. Vote: all aye. Motion passed.

#### III. Approval of Minutes (September 11, 2024)

It was moved by Commissioner Ousky and seconded by Commissioner Miller to approve the September 11, 2024, meeting minutes as presented. Vote: all aye. Motion passed.

#### IV. Administration & Operations

#### A. October Financial Report and Authorization for Payment

Administrator Belfiori summarized the October financial statement as included in the Packet. Notable items included payment to ScapeGoats, website development with HDR, Tamarack alum project preparation, and Landscape Level 2 HOA partnerships. Staff recommended approval of the bills for October.

It was moved by Commissioner Ousky and seconded by Commissioner Miller to approve the October Financial Report and authorize for payment. Vote: all aye. Motion passed.

#### B. October TEC Report to the Board of Directors

Administrator Belfiori summarized the TEC Report to Board as included in the packet. Notable items included continuing work with the City of Vadnais Heights on resiliency grant proposal partnerships, a grant project moving forward including 5 raingardens part of the City of White Bear Lake street reconstruction program, wrap-up of water quality monitoring season, increased WCA reviews, and continued work on the Watershed Management Plan. Staff recommended approval.

<u>It was moved by Commissioners Huntrods and Miller and seconded by Commissioner</u> Tessier to approve the October TEC Report to Board. Vote: all aye. Motion passed.

#### V. Programs

#### A. LL1 2024-01 Schwarz Vegetated Swale

Sampedro presented about the project as included in the packet. The grant application was from landowners in the City of Vadnais Heights. The site has high visibility and is located in a large drainage area. The project will act as a curb cut raingarden, and the site was highlighted in the East Vadnais Lake resiliency study. The project includes a 1,285 square feet vegetated swale that replaces turf grass. The design was completed by Ramsey County Soil and Water Conservation Division (RCSWCD). The project includes native forbs with varying bloom times for pollinators. Five bids were received. The lowest bid was from Landbridge Ecological.

Discussion: Chair Tessier asked why there was such a wide range in bids received. Sampedro responded that the high bid was provided by a company that was not as interested in the project so they increased their cost. Commissioner Miller asked about Landbridge Ecological's experience. Sampedro responded that Landbridge Ecological has completed similar work before and is equipped for a native restoration project like this.

It was moved by Commissioner Miller and seconded by Commissioner Ousky to approve LL1 2024-01. Vote: all aye. Motion passed.

#### VI. Projects

A. Watershed Management Plan Update and Consideration of Approach for Review of Draft Sections

Tanner presented the Watershed Management Plan is in progress and is currently in the draft portion of the BWSR-required update process. She discussed that the TEC is the official plan review committee. As sections are completed, they will be brought to the TEC for review and feedback. Houston Engineering completed drafts of Sections 1 and 2 of the Plan, as included in the packet. Staff are still providing comments on these sections, but these will

be provided again to the TEC for a more detailed discussion at the November TEC meeting, which will be the first TEC+ meeting.

Tanner discussed that staff are engaging plan review authorities as part of the TEC+ meeting to allow for comments throughout the process. Staff anticipate having 3-4 TEC+ meetings held at 9:00 am after the normal TEC meeting and will include invitations to additional partners representatives and local and state review authorities. As draft sections are ready they will be provided 1 week before the meetings for time to review and consider comments beforehand. Staff request written comments 1 week after the TEC+ meetings. Staff hope to present key draft sections at the Board of Directors' meetings and anticipate that the draft process will be completed by June 2025.

Administrator Belfiori added if TEC meetings are completed earlier than the TEC+ meetings, snacks and coffee will be provided for TEC members.

It was moved by Commissioner Miller and seconded by Commissioner Grochala to approve the TEC+ draft plan review process. Vote: all aye. Motion passed.

#### B. Tamarack Lake Alum Project Update

Tanner provided an update that the contractor wasn't able to complete the project yet due to high winds that caused a shift of the contractor's projects. Phase 1 is now scheduled to occur next week from October 14-16. She said staff hope Phase 1 completion and photos will be ready for the next TEC meeting.

#### C. Wilkinson Deep-Water Wetland Project Update

Tanner presented native plant enhancement work with Natural Shore Technologies is underway. Their staff are treating reed canary grass and retreating some of the buckthorn this week. Tanner described an experimental submergent plant transplant effort that was permitted by the MN DNR and completed with VLAWMO and RCSWCD staff, which involved transplanting Gem Lake aquatic plants to the Wilkinson deep-water wetland. A vegetation survey of the wetland will be completed next year to confirm how the plants have established.

#### D. Hybrid EWM Sampling Pleasant, Charley, Deep Results

Tanner discussed the MN DNR requested data on the Eurasion watermilfoil (EWM) in Pleasant, Charley, and Deep lakes because the intermediate characteristics did not allow conclusive ID between EWM, native, and hybrid watermilfoil. Deep Lake wasn't previously listed as infested for EWM. Hybrid watermilfoil is also invasive. The new infestation is now recorded with the MN DNR, in addition to providing more information about the known infestations in Pleasant and Charley Lakes. She added that the lab partnership updates an EWM/hybrid map that is available to the public. The Milfoil Mapper will be updated with

2024 data by the end of the year to include Pleasant, Charley, and Deep Lake data.

The Milfoil Mapper can be accessed here: <a href="https://thumlab-msu-watermilfoilapp.shinyapps.io/milfoil\_app/">https://thumlab-msu-watermilfoilapp.shinyapps.io/milfoil\_app/</a>

#### E. Vadnais Heights City Hall Summer Goat Grazing Complete

Tanner presented that the goat grazing work has been completed. ScapeGoats provided comments to staff that they were impressed with the buckthorn removal results. Tanner stated that now (this fall and winter) is a perfect time to add native seed mix that will help outcompete the buckthorn as the native plants get established.

Commissioner Miller said she is interested to see if overseeding can outcompete the small buckthorn plants. She said the the project area is transformed compared to when the project started. Commissioner Huntrods asked if the goats are selective with what they eat. Tanner responded that ongoing maintenance will still be needed, utilizing volunteer and student groups, and that the goats will eat everything that they can reach, especially by browsing. Goats are best applied to areas with high coverage of invasive plants because goats will eat native plants too. She added that smaller planted areas within the project area were fenced off to prevent goats getting to them.

#### **VII. Commissioner Reports**

None

#### VIII. NOHOA

None

#### IX. Ramsey Soil & Water Conservation Division

None

#### X. St. Paul Regional Water Services

None

#### **XI. Public Comment:**

None

#### **XII. Next Meetings:**

Next TEC meeting November 13, 2024. Next BOD meeting October 23, 2024.

#### XIII. Adjourn

It was moved by Commissioner Huntrods and seconded by Commissioner Miller to adjourn the meeting at 8:33 am. Vote: all aye. Motion passed.

Minutes compiled by D. Tanner.

#### **VLAWMO Finance Summary: November 2024**

				y. Hoveiii				
Nov-24		Actual 11/1/24	Actual to Date	Approved)	Carry over from 2023 to 2024	Remaining in Budget	2024 Available (Dec. 2023 Board approved)	Act vs. Budget
BUDGET#				INCOME				
5.11	Storm Water Utility		\$673,987	\$1,145,431	\$0	\$471,444	\$1,145,431	59%
5.12	Service Fees			\$1,000	\$0	\$1,000	\$1,000	0%
5.13	Interest + mitigation acct	\$4,096	\$54,349	\$30,000	\$0	(\$24,349)		181%
5.14	Misc. income - WCA admin & other	\$650	\$124,692	\$3,000	0.2	(\$121,692)	\$3,000	4156%
5.15	Other Income Grants/ <u>loan</u>		\$56,456	\$365,000	\$0	\$308,544	\$365,000	15%
5.16	Transfer from reserves			\$791,380	\$193,062	\$984,442	\$984,442	0%
	TOTAL	\$4,746	\$909,484	\$2,335,811	\$193,062	\$1,619,389	\$2,528,873	39%
		. , -	, , , , ,	EXPENSES		, ,, ,,	. , ,	
3.1	Operations & Adminis	etration		EAT EAGE				
3.1	Office - rent, copies,	I	I	I	1	I	1	ı
3.110	post tel supplies	\$2,186	\$22,843	\$32,239	\$0	\$9,396	\$32,239	71%
3.120	Information Systems	\$2,864	\$20,721	\$33,850	\$0	\$13,129	\$33,850	61%
3.130	Insurance		\$11,329	\$10,050	\$0	(\$1,279)	\$10,050	113%
3.141	Consulting - Audit		\$20,171	\$12,000	\$7,000	(\$1,171)	\$19,000	106%
3.142	Consulting - Bookkeeping	\$47	\$496	\$1,500	\$0	\$1,004	\$1,500	33%
3.143	Consulting - Legal	\$307	\$5,735	\$7,000	\$0	\$1,265	\$7,000	82%
3.144	Consulting - Eng. & Tech.	\$406		\$30,000	\$20,000	\$35,031	\$50,000	30%
3.150	Storm Sewer Utility		\$10,807	\$22,500	\$0	\$11,693	\$22,500	48%
3.160	Training (staff/board)	\$7,500		\$14,250	\$0	\$5,776	\$14,250	59%
3.170	Misc. & mileage	\$479	\$3,726	\$6,930	\$0	\$3,204	\$6,930	54%
3.191	Administration - staff	\$27,591	\$358,643	\$435,554	\$0	\$76,911	\$435,554	82%
3.192	Employer Liability	\$8,533	\$102,183		\$0	\$27,686	\$129,869	79%
			Ψ102,103	\$129,869	φΟ	Ψ21,000	Ψ123,003	1370
3.2	Monitoring and Studi Lake and Creek lab	les T						
3.210	analysis	\$4,540	\$23,479	\$18,000	\$0	(\$5,479)	\$18,000	130%
3.220	Equipment	\$20	\$145	\$3,000	\$0	\$2,855	\$3,000	5%
3.220	Wetland assessment	Ψ20	Ψ143	\$3,000	Φ0	Ψ2,033	ψ3,000	370
3.230	& management		\$5,900	\$15,000	\$0	\$9,100	\$15,000	39%
3.240	/special study	\$10,294	\$46,420	\$100,000	\$15,000	\$68,580	\$115,000	40%
3.3	Education and Outre	acn						
3.310	Public Education		\$2,026	\$6,000	\$0	\$3,974	\$6,000	34%
3.320	Comm., Outreach & Marketing		\$7,824	\$20,000	\$2,000	\$14,176	\$22,000	36%
3.330	Community Blue Ed Grant		\$739	\$8,000	\$0	\$7,261	\$8,000	9%
	functions: Ops,	\$64,767	\$666,630	\$905,742	\$44,000	\$283,112	\$949,742	70%
	<u>, Education</u> provement Projects ar	d Drograma					<u> </u>	
			I	I	Ī			
3.4	Subwatershed Activit	У						
3.410	Gem Lake			\$25,000	\$10,000	\$35,000	\$35,000	
3.420	Lambert Creek		\$11,895	\$90,000	\$0	\$78,105	\$90,000	13%
3.421	Lambert Lake Loan	\$19,284	\$38,568	\$38,569	\$0	\$1	\$38,569	100%
3.425	Goose Lake	\$1,675	\$64,281	\$85,000	\$0	\$20,719	\$85,000	76%
3.430	Birch Lake		\$1,150	\$48,000	\$0	\$46,850	\$48,000	2%

	Total of Core Operations & CIP	\$160,449	\$1,177,048	\$1,970,811	\$193,062	\$986,825	\$2,163,873	54%
	Total CIP & Program	\$95,682	\$510,418	\$1,065,069	\$149,062	\$703,713	\$1,214,131	42%
3.510	Engineer Plan review			\$5,000	\$0	\$5,000	\$5,000	0%
3.5	Regulatory							
3.485	Facilities Maintenan/ Pub. Ditch Main.	\$16,962	\$22,811	\$78,000	\$0	\$55,189	\$78,000	29%
3.483	Project Research & feasibility			\$5,000	\$0	\$5,000	\$5,000	0%
3.482	Landscape 2/BWSR WBF	\$9,993	\$62,991	\$60,000	\$25,299	\$22,308	\$85,299	74%
3.481	Landscape 1		\$9,364	\$40,000	\$16,263	\$46,899	\$56,263	17%
3.480	Soil Health Grant		\$10,376	\$10,500	\$4,500	\$4,624	\$15,000	69%
3.48	Programs							
3.460	Sucker Vadnais		\$50,191	\$90,000	\$33,000	\$72,809	\$123,000	41%
3.450	Pleasant Charley Deep		\$62,721	\$145,000	\$0	\$82,279	\$145,000	43%
3.440	Gilf Black Tam Wilk Amelia	\$47,768	\$176,070	\$345,000	\$60,000	\$228,930	\$405,000	43%

Fund Balance	10/1/2024	11/1/2024
4M Account	\$816,830	\$689,470
4M Plus Savings	\$249,808	\$250,836
Total	\$1,066,638	\$940,306

Restricted for	11/1/2024	
Mitigation Sa	\$21,029	
Term Series		\$300,000

## Vadnais Lake Area Water Management Organization Check Detail

11:25 AM 11/05/2024

October 10 through November 13, 2024

_	Туре	Num	Date	Name	Item	Account	Paid Amount	Original Amount
c	Check	eft	10/17/2024 Reliance \$	Standard	(	Checking - 1987		-332.82
					I	Insurance Benefit	-332.82	332.82
DTAL							-332.82	332.82
c	Check	eft	10/22/2024 further		(	Checking - 1987		-6.00
					1	Insurance Benefit	-6.00	6.00
OTAL							-6.00	6.00
c	Check	eft	11/01/2024 US Bank		•	Checking - 1987		-47.30
					;	3.142 · Bookkeeping help	-47.30	47.30
OTAL							-47.30	47.30
c	Check	5883	11/13/2024 Barr Engi	neering Co	•	Checking - 1987		-9,242.10
					;	3.440 · Gilfillan Black Tamarack Wilkin	-5,354.70	5,354.70
					;	3.440 · Gilfillan Black Tamarack Wilkin	-2,034.90	2,034.90
					;	3.425 · Goose Lake	-1,600.00	1,600.00
					;	3.144 · Eng. & Tech.	-252.50	252.50
OTAL							-9,242.10	9,242.10
c	Check	5884	11/13/2024 Lake Rest	oration	•	Checking - 1987		-25,580.00
					;	3.440 · Gilfillan Black Tamarack Wilkin	-25,580.00	25,580.00
OTAL							-25,580.00	25,580.00
C	Check	5885	11/13/2024 Houston E	Engineering, Inc	•	Checking - 1987		-10,294.25
					;	3.240 · Watershed Plan Amendment	-10,294.25	10,294.25
TAL							-10,294.25	10,294.25
c	Check	5886	11/13/2024 Dawn Tan	ner	•	Checking - 1987		-81.74
					;	3.170 · Misc. & mileage	-81.74	81.74
OTAL							-81.74	81.74
c	Check	5887	11/13/2024 Brian Core	coran	•	Checking - 1987		-64.99
					;	3.170 · Misc. & mileage	-64.99	64.99
DTAL							-64.99	64.99
c	Check	5888	11/13/2024 RMB Envi	ronmental Laboratories, Inc.	(	Checking - 1987		-5,004.44
					;	3.210 · Lake & Creek lab analysis	-1,302.00	1,302.00
					,	Wilk 319 cash match \$182,137	-267.52	267.52
					;	3.210 · Lake & Creek lab analysis	-564.30	564.30

	3.210 · Lake & Creek lab analysis	-76.29	76.29
	3.210 · Lake & Creek lab analysis	-1,237.28	1,237.28
	Wilk 319 cash match \$182,137	-196.46	196.46
	3.210 · Lake & Creek lab analysis	-1,360.59	1,360.59
TOTAL		-5,004.44	5,004.44
Check 5889 11/13/2024 Metro - Inet	Checking - 1987		-1,571.00
	IT Support	-1,571.00	1,571.00
TOTAL		-1,571.00	1,571.00
Check 5890 11/13/2024 Natural Shore Technologies, Inc	Checking - 1987		-29,625.00
	3.485 · Facilities & Maintenance	-15,400.00	15,400.00
	Wilk 319 cash match \$182,137	-14,225.00	14,225.00
TOTAL		-29,625.00	29,625.00
Check 5891 11/13/2024 Ramsey County	Checking - 1987		-5,040.00
	3.482 · Landscape 2	-5,040.00	5,040.00
TOTAL	-	-5,040.00	5,040.00
Check 5892 11/13/2024 Dell Marketing L.P.	Checking - 1987		-1,292.51
	Hardware	-1,292.51	1,292.51
TOTAL	-	-1,292.51	1,292.51
Check 5893 11/13/2024 Minnesota Watersheds	Checking - 1987		-7,500.00
	3.160 · Training (staff/board)	-7,500.00	7,500.00
TOTAL		-7,500.00	7,500.00
Check 5894 11/13/2024 Minnesota Pollution Control Agency	Checking - 1987		-19,284.48
	3.421 · Lambert Lake Loan \$385,689.54	-19,284.48	19,284.48
TOTAL		-19,284.48	19,284.48
Check 5895 11/13/2024 City of Vadnais Heights	Checking - 1987		-2,185.58
	Rent	-1,765.00	1,765.00
	Phone/Internet/Machine Overhead	-315.00	315.00
	Postage	-38.66	38.66
	Copies	-66.92	66.92
TOTAL		-2,185.58	2,185.58
Check 5896 11/13/2024 Pine Meadow HOA	Checking - 1987		-4,953.48
	3.482 · Landscape 2	-4,953.48	4,953.48
TOTAL		-4,953.48	4,953.48
Check 5897 11/13/2024 Press Publications	Checking - 1987		-332.11
	3.170 · Misc. & mileage	-332.11	332.11

TOTAL		-332.11	332.11
Check 5898 11/13/2024 City of White Bear Lake	Checking - 1987		-35,785.87
	payroll	-27,591.42	27,591.42
	Administration FICA	-1,978.66	1,978.66
	Administration PERA	-2,069.34	2,069.34
	Insurance Benefit	-3,902.12	3,902.12
	Admin payroll processing	-244.33	244.33
TOTAL	·	-35,785.87	35,785.87
Check 5899 11/13/2024 Town Law Center, PLLP	Checking - 1987		-569.40
	3.440 · Gilfillan Black Tamarack Wilkin	-109.50	109.50
	3.143 · Legal	-109.50	109.50
	3.144 · Eng. & Tech.	-153.30	153.30
	3.143 · Legal	-197.10	197.10
TOTAL	•	-569.40	569.40

# Vadnais Lake Area Water Management Organization Profit & Loss

11:23 AM 11/05/2024

October 10 through November 13, 2024

**Cash Basis** 

	Oct 10 - Nov 13, 24
Ordinary Income/Expense	
Income	
Misc.	650.00
5.1 · Income	
5.13 · Interest	4,095.61
Total 5.1 · Income	4,095.61
Total Income	4,745.61
Gross Profit	4,745.61
Expense	
3.1 · Administrative/Operations	
3.110 · Office	
Copies	66.92
Phone/Internet/Machine Overhead	315.00
Postage	38.66
Rent	1,765.00
Total 3.110 · Office	2,185.58
3.120 · Information Systems	
Hardware	1,292.51
IT Support	1,571.00
Total 3.120 · Information Systems	2,863.51
3.142 · Bookkeeping help	47.30
3.143 · Legal	306.60
3.144 · Eng. & Tech.	405.80
3.160 · Training (staff/board)	7,500.00
3.170 · Misc. & mileage	478.84
3.191 · Employee Payroll	
payroll	27,591.42
Total 3.191 · Employee Payroll	27,591.42
3.192 · Employer Liabilities	
Admin payroll processing	244.33
Administration FICA	1,978.66
Administration PERA	2,069.34
Insurance Benefit	4,240.94
Total 3.192 · Employer Liabilities	8,533.27
Total 3.1 · Administrative/Operations	49,912.32
3.2 · Monitoring and Studies	
3.210 · Lake & Creek lab analysis	4,540.46
3.220 · Equipment	19.56
3.240 · Watershed Plan Amendment	10,294.25
Total 3.2 · Monitoring and Studies	14,854.27
3.4 · Capital Imp. Projects/Programs	
3.421 · Lambert Lake Loan \$385,689.54	19,284.48

3.425 · Goose Lake	
Oak Knoll	75.03
3.425 · Goose Lake - Other	1,600.00
Total 3.425 · Goose Lake	1,675.03
3.440 · Gilfillan Black Tamarack Wilkin	
Wilk 319 cash match \$182,137	14,688.98
3.440 · Gilfillan Black Tamarack Wilkin - Other	33,079.10
Total 3.440 · Gilfillan Black Tamarack Wilkin	47,768.08
Total 3.4 · Capital Imp. Projects/Programs	68,727.59
3.48 · Programs	
3.482 · Landscape 2	9,993.48
3.485 · Facilities & Maintenance	16,962.00
Total 3.48 · Programs	26,955.48
Total Expense	160,449.66
Net Ordinary Income	-155,704.05
Net Income	-155,704.05

# Vadnais Lake Area Water Management Organization Custom Transaction Detail Report

11:21 AM

11/05/2024 Accrual Basis

September 1 through November 1, 2024

	Туре	Date	Num	Name	Memo	Account	Clr	Split	Amount	Balance
Sep 1 - Nov 1, 24										
	Credit Card Charge	09/02/2024		Google SVCAPPS VLAWM		S Bank CC	$\checkmark$	WEB	42.00	42.00
	Credit Card Charge	09/05/2024		MN Association of Gov. Communicators	E&O job posting	S Bank CC	$\checkmark$	3.320 · Marketing	85.00	127.00
	Credit Card Charge	09/09/2024		Menards	weed transplant supplies	S Bank CC	$\checkmark$	3.220 · Equipment	31.28	158.28
	Credit Card Charge	09/09/2024		adobe photography plan		S Bank CC	$\checkmark$	Software	9.99	168.27
	Credit Card Charge	09/13/2024		Go Daddy	domain renewal	S Bank CC	$\checkmark$	WEB	23.17	191.44
	Credit Card Charge	09/17/2024		Hampden Park Coop	mustard Dawn	S Bank CC	$\checkmark$	3.220 · Equipment	5.04	196.48
	Credit Card Charge	09/19/2024		Government Jobs	E&O job posting	S Bank CC		3.170 · Misc. & mileage	199.00	395.48
	Transfer	09/20/2024			Funds Transfer	S Bank CC		Checking - 1987	-313.94	81.54
	Credit Card Charge	09/24/2024		Prairie Moon Nursery	remnant seed	S Bank CC		3.460 · Sucker Vadnais	156.00	237.54
	Credit Card Charge	09/25/2024		Adobe Creative Cloud		S Bank CC	$\checkmark$	Software	32.50	270.04
	Credit Card Charge	10/02/2024		Google SVCAPPS VLAWM		S Bank CC		WEB	42.00	312.04
	Credit Card Credit	10/08/2024		pdl ccapsconf3	Dawn 2024 WR Conf. \$200 refund	S Bank CC		3.160 · Training (staff/board)	-200.00	112.04
	Credit Card Charge	10/10/2024		Prairie Moon Nursery	city hall seed	S Bank CC		3.485 · Facilities & Maintenance	1,562.00	1,674.04
	Credit Card Charge	10/29/2024		fedex	flyers	S Bank CC		Oak Knoll	57.51	1,731.55
	Credit Card Charge	10/29/2024		S Post Office	flyers	S Bank CC		Oak Knoll	17.52	1,749.07
	Credit Card Charge	10/30/2024		Ace Hardware	5 qt buckets	S Bank CC		3.220 · Equipment	19.56	1,768.63
Sep 1 - Nov 1, 24									1,768.63	1,768.63



#### TEC Staff Memo - November 13, 2024

#### IV. Administration & Operations

- A. November Financial Report and Consider Authorization for Payment Please find the November financial report and authorization to pay bills in the ePacket for consideration and approval.
- B. Consider Moving Regular TEC Meetings Start Time to 8:15am for All Upcoming TEC + Meeting Days

After the October 9<sup>th</sup> TEC meeting, Chair Tessier recommended starting all upcoming TEC meetings at 8:15 when a TEC + draft plan review meeting is scheduled that same day at 9am.

- C. Reminder TEC + Meeting at 9 am Today. TEC + Meeting Packet Information Sent in Separate Email on Nov. 6th

#### V. Programs

#### A. Consideration of 2025 Proposed Grant Program Updates

VLAWMO staff are proposing a few minor updates to the Soil Health Grant Program, Landscape Level 1 Grant Program, and Landscape Level 2 Grant Program for 2025. No changes are being proposed for the Rain Barrel Grant Program. Staff routinely reviews each program and determines if any updates or improvements are necessary based on experiences from the previous year and to keep the programs up-to-date.

The key proposed policy updates are clarifying existing language on paid invoices and the shifting of grant program funding, clarifying the difference between raingardens eligible under Soil Health Grant Program and the Landscape Level 1 Grant Program, and clarifying that enhanced street sweeping technology is an eligible expense under the Landscape Level 2 Grant Program. A minor proposed change to the Landscape Levels 1 and 2 Grant Program application form is to clarify the total cost of the project should be based on the lowest bid.

In the TEC packet as attached are the proposed draft grant policy and application form updates with new red text or red lined text. Also attached is an updated



guidance document for applicants that includes a list of non-native/cultivar of native plants that are exceptions to the 100% native plant requirement under the Soil Health and Landscape Level 1 Grant Programs.

**Requested action**: Staff recommend the TEC recommends approval of the proposed 2025 grant program changes to the Board of Directors.

#### VI. Projects

A. Update on MPCA Grant Application Partnerships with City of Vadnais Heights VLAWMO and the City of Vadnais Heights have continued moving forward with assessing the feasibility of doing a flood reduction and water quality project in the undeveloped area behind Vadnais Heights City Hall that was identified in the East Vadnais Lake Subwatershed Resiliency Study. The MPCA released a new grant opportunity called the Sewer Overflow and Stormwater Reuse Municipal Grant that would help VLAWMO and the City complete the additional feasibility work necessary to finalize plan development for a construction-ready project design for the potential project behind City Hall. The grant opportunity is focused on supporting the planning and design services needed for critical infrastructure projects that reduce localized flooding risks. Grant applications are due on November 22nd and VLAWMO staff are supporting the City of Vadnais Heights with developing a grant application.

The MPCA also released a next round of their Planning Grant for Stormwater, Wastewater, and Community Resilience that VLAWMO previously applied for in 2022 for the East Vadnais Lake Subwatershed Resiliency Study. This grant is focused on supporting vulnerability assessment and planning efforts for improving the resilience to stormwater and reducing localized flood risk to prepare for Minnesota's changing climate. The City of Vadnais Heights is interested in submitting a grant application for completing a resiliency study for the remaining areas of the City that were not covered by the East Vadnais Resiliency Study to build on the resiliency partnership work with VLAWMO. Applications are due for this grant on November 14th. VLAWMO staff are supporting the City of Vadnais Heights with developing a grant application.

Staff will provide the TEC an update if either or both of these grant applications are successful.

#### B. Update on Gully Repair Outfalls Construction

The 2023 VLAWMO Ditch Report identified a large gully and erosion issues on CD14 at the Edgerton St & Koehler Rd intersection. VLAWMO worked with Ramsey County and the City of Vadnais Heights on repair timing and funding. The gully was repaired and the culvert under Edgerton St was extended this fall as part of the Vadnais Heights trail construction. Drainage in the area was also modified to redirect runoff to storm basins rather than down the ditch banks on either side of Edgerton.

November 13, 2024, VLAWMO TEC Meeting Staff Memo







# C. Update on Tamarack Lake Alum Project Phase 1 project implementation was conducted October 14-16, 2024. Phase 1 was successfully completed. An invoice for phase 1 was submitted by Lake

November 13, 2024, VLAWMO TEC Meeting Staff Memo



Restorations, Inc., recommended by Barr, and authorized by the VLAWMO Board at the October 23, 2024, meeting. Planning for phase 2 (anticipated shortly after iceout in the spring) is underway. Planning includes renewing the temporary access agreement with Ramsey County Parks and Tamarack Nature Center.

**Attachment**: PPT with photos and early results of phase 1

#### D. Update on Oak Knoll Spent Lime Interim Report/Memo

VLAWMO has received an interim memo/report from Barr Engineering for the spent lime treatment completed in Oak Knoll Pond/Wood Lake. Early results show:

"In general, it appears that the spent lime treatment has dropped the total phosphorus concentrations in Oak Knoll Pond by approximately half, both at the surface and bottom of the pond, with no sign of internal phosphorus release since the deeper zone (Zone 2) applications began. In addition, Secchi disc water transparency readings doubled (from 1.5 to 3.0 feet) in the spring and early summer of 2024 as the spent lime applications concluded. Late July and August transparency readings dropped to 1.5 feet following several wet weather runoff events but fall transparency readings returned to 3 feet."

Barr Engineering estimates that the water quality benefit (Total Phosphorus reduction) for this project so far is 16 pounds per year.

Attachment: Memo from Barr Engineering dated October 14, 2024

# **VLAWMO Proposed 2025 Grant Program Updates**

Lauren Sampedro TEC Meeting 11/13/24



# **Rain Barrel Grant**



No changes

Vadnais Lake Area Water Management Organization

### **Soil Health Grant**



#### **Policy Changes**

- Added under "Soil Health Grant Process", grant funding amounts can be shifted between any of the Landscape program budgets based on demand
- Removed monthly deadline for submitting applications
- Added "zero remaining balance" to "paid invoices" to clarify necessary reimbursement documentation

Vadnais Lake Area Water Management Organization

# **Landscape Level 1 Grant**



#### **Policy Changes**

- Clarified raingarden to differentiate from SHG-eligible downspout raingardens
- Added "zero remaining balance" to "paid invoices" to clarify necessary reimbursement documentation
- Added grant funding amounts can be shifted between any of the Landscape program budgets to include SHG program
- Clarified "lowest responsible bid" under "estimated total project cost on application form

Vadnais Lake Area Water Management Organization

# **Landscape Level 2 Grant**



#### **Policy Changes**

- Added "zero remaining balance" to "paid invoices" to clarify necessary reimbursement documentation
- Added "enhanced street sweeping technology" to clarify eligibility
- Added grant funding amounts can be shifted between any of the Landscape program budgets to include SHG program
- Clarified "lowest responsible bid" under "estimated total project cost on application form

Vadnais Lake Area Water Management Organization

# Non-native Plant Guide: Before

#### For any plant purchase, pay attention to the scientific (noncommon) name on the label. Hybrid cultivars will include single quotations at the end of the names. Check this list to ensure that any cultivars sought at also some of the few eligible for cost share **Native Alternatives:** Bee Lawn mixes: Creeping Thyme, Dutch White, Red Clover, Self-heal, etc. Fescue lawn and "lo-mow" seed mixes Bottlebrush Grass, Buffalo Grass Little Bluestem, Switchgrass, Pennsylvania Sedge, Palm Sedge Blue-eyed Grass Perennials: Sweet Black/brown-eved Susan Black-eved Susan 'Goldstrum' Rattlesnake Master Sedum 'Autumn Joy' Prairie Phlox, Wild Blue Phlox Creeping Phlox Columbine, Prairie Alumroot Garden Phlox Nodding Wild Onion, Prairie Onion Coral Bells/ Heuchera Spotted Beebalm Downy Wood Mint Blazing Star, Wild Petunia Blanket Flower hybrids Milkweeds Poppy Mallow Aromatic Aster Bee Balm hybrids Purple Coneflower Russian Sage Narrow-leaved Coneflower Yarrow hybrids Hoary Puccoon Catmint Sweet/spotted Joe Pye Weed Phantom Joe Pye Weed Large-flowered Beardtongue Foxglove Beardtongue

VLAWMO

Nannyberry, River Birch New Jersey Tea, Dogwoods, Service Berry, Witch Hazel

High Bush Cranberry

**Cost Share Plant Guide** 

Nonnative and noninvasive plants are commonly found in the landscaping industry but a select few are eligible for reimbursement in VLAWMO's cost share programs.

Vadnais Lake Area Water Management Organization

**Shrubs and Trees:** 

Crabapple

Gro-low Sumac

# **Non-native Plant Guide: After**

#### **Non-Native Plant Guide**

Non-native plants are commonly found in the landscaping industry but a select few are eligible for reimbursement in VLAWMO's grant programs.



For any plant purchase, pay attention to the scientific (non-common) name on the label. Hybrid cultivars will including quotations' at the end of the names. Check this list to ensure that any cultivars sought are eligible for reimburseme

#### Grasses:

- . Bee Lawn mixes: Creeping Thyme, Dutch White Clover, Self-heal
- Fescue Lawn and "Lo-mow" seed mixes
- River Oats



#### Flowers/Forbs:



- Black-eyed Susan 'Goldsturm' Sedum 'Autumn Joy'
- Downy Wood Mint Dense/Marsh Blazing Star • Heartleaf Foamflower
- Bee Balm hybrids Russian Sage Queen of the Prairie
- Catmint
- · Phantom Joe Pye Weed · Royal Catchfly
- Mistflower
- - Eastern Purple

#### **Shrubs and Trees:**

- Crabapple
- Gro-low Sumac
- Serviceberry hybrids
- Hawthorn hybrids



Vadnais Lake Area Water Management Organization

## **Staff Recommendation**



Recommend approval of the proposed 2025 cost grant program changes

Vadnais Lake Area Water Management Organization

## **Soil Health Grant Policy**



The Soil Health Grant Program is a reimbursement program to help landowners install small-scale practices that improve water quality and soil health within the VLAWMO watershed. Applicants may apply for 75% of the project cost, up to a maximum of \$1,000. An applicant may apply for up to \$1,250 if located in or within 500 ft. of a VLAWMO priority area.



#### **Eligible Projects:**

- Native plantings & pollinator gardens
- Turf grass replacement and pollinator-friendly yards (i.e. bee lawns)
- Downspout or small-scale yard raingardens
- Buffer strips
- Erosion control or stabilization

#### **Ineligible Projects:**

- Non-native plant landscaping, decorative, or recreational projects
- Retaining walls
- Chemical treatment of aquatic vegetation
- Projects that have received funding from other VLAWMO grant programs in the same year
- Maintenance of awarded grant projects

There are more living organisms in 1 Tbsp of soil than there are people on earth.



#### **Soil Health Grant Process:**

Soil Health Grant funding is available to landowners within the VLAWMO boundary. The grant program operates on a first-come, first-served basis. The VLAWMO Board of Directors may shift grant funding amounts between Landscape Grant program budgets based on demand. Applications must be submitted by the 4th Friday of the month for review and potential consideration at VLAWMO's Technical Commission (TEC) meetings.

- 1. Contact staff to schedule a site visit of your property and discuss your proposed project before submittal of a grant application.
- 2. Complete a grant application and submit to staff listed on the grant application.
- 3. VLAWMO will review application and confirm completeness.
- 4. Complete applications will be presented at the next VLAWMO TEC meeting per its meeting schedule.
- 5. VLAWMO will notify applicant of application status and next steps.

It takes at least 500 years to form 1" of topsoil.

#### **Program Details: Planning for Success**

#### Projects started prior to VLAWMO approval are not eligible. A grant application must be approved for funding, and the grant agreement must be signed by the applicant and VLAWMO prior to starting work.

Changes to the project after grant approval may not be made without VLAWMO approval.

# Eligible project costs are those only directly related to installing the proposed project such as plants, erosion control materials, mulch, drainage structures, and rented equipment. Purchased tools and equipment are not eligible. Eligibility of materials is subject to VLAWMO approval.

- Grant awards will expire within 1 year of grant approval unless the project is extended with VLAWMO approval.
- Landowners are limited to 1 grant application every other year unless a single project must be completed in phases (up to 3 years) and approved by VLAWMO.
- Grantee must agree to maintain the project for at least **5 years**. The site may be inspected by VLAWMO staff to ensure compliance.

# bor & Plant Specifics

- Eligible labor costs must be those associated with a landscaper/contractor subject to approval by VLAWMO staff. VLAWMO reserves the right to adjust costs submitted for reimbursement based on final paid receipts and invoices. Reimbursement will not exceed the cost of eligible materials and labor.
- Erosion control activities must use natural erosion control material (i.e. non-plastic).
- For all projects, only plants native to MN are eligible for reimbursement. Hybrids/cultivars of native plants are not eligible unless otherwise noted on VLAWMO's cost share plant guide. Bee lawns must use specially marked bee lawn mixes. Native trees may be considered on a case-by-case basis if beneficial to pollinators or part of a stormwater practice. A list of proposed plants must be included with the application for VLAWMO review and approval; VLAWMO will have final discretion in species selection and number of trees allowed per application.

# Telling the Story

- Grantee must participate in VLAWMO's education efforts by:
  - ⇒ Providing photos of project progress including before, during installation, freshly completed, and one year after project completion; OR
  - ⇒ Providing a posed picture with completed project & short quote about what was enjoyable about the project or lessons learned.

#### **Reimbursement Steps:**

- 1. Execute grant agreement with VLAWMO.
- After project completion, contact VLAWMO staff to request a final inspection of the project for verification it meets the approved plans. This must occur within 1 year from the date of grant approval.
- Submit all paid, zero remaining balance invoices and receipts of project expenses for VLAWMO
  review. Plant expenses must show species on proof of payment or via grantee's annotations or
  supplemental spreadsheet. Final grant award amounts will be based on the completed work and
  total paid project amount.
- 4. If the above steps are completed and approved by staff, VLAWMO will mail a reimbursement check per the VLAWMO TEC monthly meeting schedule.

# Landscape Level 1 Grant Policy



The Landscape Level 1 (LL1) Grant Program is a reimbursement program to help landowners install practices that improve water quality and preserve groundwater within VLAWMO.

VLAWMO may fund 25-50% of the total cost of approved materials and contracted labor up to a maximum of \$5,000. Highly beneficial projects that significantly reduce stormwater volume and nutrients like curb cut raingardens may receive 75% of the cost of the project up to a maximum of \$7,500. VLAWMO reserves the right to adjust requested funding levels based on funding availability and estimated benefits.



#### **LL1 Program Goals:**

- Reduce stormwater rate and volume
- Stabilize and restore actively-eroded shorelines/streambanks
- Reduce nutrient loading and improve water quality
- Protect and preserve groundwater quality and quantity

#### **Eligible Projects:**

- Infiltration projects including but not limited to raingardens that collect stormwater runoff from surfaces beyond roofs, infiltration basins, permeable pavers/pavement, and tree trenches
- Filtration projects including but not limited to filtration basins, swales, and green roofs
- Shoreline and streambank restorations of actively-eroding banks
- Critical erosion control and stabilization projects
- Agricultural water quality practices
- Projects that improve existing water quality projects (i.e. a new pre-treatment inlet structure)
- Stormwater reuse for irrigation or other groundwater preservation projects

#### **Ineligible Projects:**

- Landscaping and decorative projects for recreational or aesthetic purposes
- Chemical treatment of aquatic vegetation (excluding alum or spent lime)
- Vegetation restoration without stormwater treatment (see Soil Health Grant Program)
- Projects necessary to meet minimum permit requirements or VLAWMO water management standards
- Projects that have received funding from other VLAWMO grant programs in the same year
- Maintenance of awarded grant projects

#### **Application Process:**

Landscape Level 1 Grant funding is available to landowners within the VLAWMO boundary. The grant program operates on a first-come, first-served basis. All submitted applications are subject to VLAWMO scoring to determine funding eligibility and approval by the VLAWMO Technical Commission (TEC) and/or Board of Directors.

- 1. **Contact staff** to schedule a site visit of your property before submittal of a grant application to discuss your proposed project.
- 2. **Complete a grant application** and submit to staff listed on the grant application.
- 3. VLAWMO may require a **final design** completed by a qualified professional or engineer for complex projects.
- 4. VLAWMO will **review application** and confirm completeness.
- Complete applications that meet the minimum criteria will be presented at the next VLAWMO TEC meeting and/or Board of Directors meeting per their meeting schedule.

6. VLAWMO will **notify applicant** of application status and next steps, including execution of a grant agreement.

#### **Grant Funding Agreement:**

Each grantee must enter into a grant agreement with VLAWMO defining the obligations of the grantee and VLAWMO and expectations for project maintenance. The agreement also allows VLAWMO access to the project area for inspection and promotion of the project. The grant agreement must be signed by both parties prior to starting work on the project.



#### **Reimbursement Steps:**

- 1. Execute grant agreement with VLAWMO.
- After project completion, contact VLAWMO staff to request a final inspection of the project for verification it meets the approved plans. This must occur within 1 year from the date of grant approval.
- 3. Submit all **paid**, **zero remaining balance** invoices and receipts of project expenses for VLAWMO review. Plant expenses must show species on proof of payment or via grantee's annotations or supplemental spreadsheet. Final grant award amounts will be based on the completed work and total paid project amount.
- 4. If the above steps are completed and approved by staff, VLAWMO will mail a reimbursement check per the VLAWMO TEC's monthly meeting schedule.

#### **Program Details: Planning for Success**

### Start & Finish

- **Projects started prior to VLAWMO approval are not eligible.** A grant application must be approved for funding, and the grant agreement must be signed by the applicant and VLAWMO prior to starting work.
- Changes to the project after grant approval may not be made without VLAWMO approval.
- Grantee is responsible for securing any and all required permits, easements, and approvals prior to the start of the project.
- Grantee must complete the project and submit a reimbursement request within 1 year from date of grant approval unless the project is extended with VLAWMO approval.
- Grantee must agree to maintain the project for a **minimum of 10 years**. The site may be inspected by VLAWMO staff during this time period to ensure compliance.

# Labor & Plant Specifics

- Eligible project costs are those only directly related to installing the proposed project such as
  plants, erosion control materials, mulch, drainage structures, and rented equipment.
   Purchased tools and equipment are not eligible. Eligibility of materials is subject to VLAWMO
  approval.
- Eligible labor costs must be those expenses associated with a qualified landscaper/ contractor subject to approval by VLAWMO staff. VLAWMO reserves the right to adjust costs submitted for reimbursement based on final paid receipts and invoices. Reimbursement will not exceed the cost of eligible materials and labor.
- VLAWMO may consider design costs through the Ramsey County Soil & Water Conservation
   Division or from another contractor as eligible grant costs, up to \$1,500.
- Erosion control activities must utilize natural erosion control material (i.e. non-plastic).
- For all projects, only plants native to Minnesota are eligible for grant reimbursement.
   Hybrids/cultivars of native plants are not eligible for reimbursement unless otherwise
   noted on the VLAWMO non-native plant guide. Native trees may be considered on a case by-case basis if part of a stormwater practice. A list of proposed plants must be included
   with the application for VLAWMO review and approval; VLAWMO will have final discretion in
   species selection and number of trees allowed per application.
- At least 2 bids for construction of proposed projects must be submitted with the application. VLAWMO reserves the right to reject a project design or submitted bid for any reason.
- Permeable paver projects must meet Minnesota Pollution Control Agency installation guidelines and treat at least 1,500 sq. ft. of hard surface runoff.

# dmin

- VLAWMO reserves the right to withdraw or withhold funding for any project not completed in accordance with these guidelines or the terms of its executed grant agreement.
- Landowners are limited to 1 grant application every other year unless a single project must be completed in consecutive phases (up to 3 years) and approved by VLAWMO.
- The VLAWMO Board of Directors may shift grant funding amounts between <u>LL1 & LL2</u>
   Landscape Grant program budgets.
- Any submitted information (applications, designs, cost estimates, bids, permits, studies, reports, and proof of expenditures) becomes part of the public record.

# **LL1 Grant Application**



Submit completed application to: Lauren Sampedro lauren.sampedro@vlawmo.org

<b>Applicant Informat</b>	ion:		
Name:			
Address:			
City/Township, State, Zip:			
Phone:			
Email:			
Project Summary:		PROJECT	ТҮРЕ:
ESTIMATED TOTAL PROJECT	COST		Raingarden/Infiltration Basin: Curb cut
(Lowest responsible bid \$)			Raingarden/Infiltration Basin: Regular
AMOUNT REQUESTED			_
(\$5,000 reg, \$7,500 curb o	eut)		Shoreline/Streambank Stabilization and/or Restoration
EXPECTED PROJECT COMPL	ETION		Filtration
(Month, Year)			Othor
If other, please describe			Other
the proposed project:			
Project Backgroun	ıd:		
Describe the project location			
Does it connect to a lake, studitch, or wetland in VLAWMO			
What issues will be addresse this project?	ed with		

#### **Project Background: Continued** Describe how your project will support the goals of the Landscape Level 1 **Grant Program.** (See LL1 policy) Briefly describe the planned installation and maintenance activities for your project. **Project Specifications: TOTAL PROPERTY AREA Total PROJECT SIZE** (Acres) (Sq Ft) **IMPERVIOUS (HARD) AREA** PERVIOUS (GRASSY, NON-DRAINING TO PROJECT (Sq Ft): **PAVEMENT) AREA DRAINING** TO PROJECT (Sq Ft): **DEPTH OF PRACTICE (In): BOTTOM SURFACE AREA (Sq Ft):** Provide if project includes Provide if project includes infiltration/filtration infiltration/filtration

#### **Required Attachments:**

- ⇒ Detailed drawing or plan of the proposed project. If project is complex, VLAWMO may require project final designs to be completed by a qualified professional or engineer. Drawing must include project dimensions that enable VLAWMO staff to model the project for estimated water quality benefits.
- ⇒ At least 2 bids for construction of proposed project.
- ⇒ Detailed project budget estimate with itemized materials and costs that equal the total project cost.

# Landscape Level 2 **Grant Policy**



The Landscape Level 2 (LL2) Grant Program is a reimbursement program to partner with communities to install practices that improve water quality, manage stormwater, and preserve groundwater within VLAWMO.

VLAWMO may fund 25-75% of the total cost of a project, or up to 90% for large-scale or highly beneficial projects that significantly improve water quality, increase flood storage, conserve groundwater, or provide regional benefits. VLAWMO reserves the right to adjust requested funding levels based on funding availability and estimated benefits.







#### **LL2 Program Goals:**

- Reduce stormwater rate and volume
- Stabilize and restore actively-eroding shorelines/streambanks
- Reduce nutrient loading and improve water quality.
- Protect and preserve groundwater quality and quantity
- Increase flood storage
- Address goals and policies identified in the **VLAWMO Comprehensive Watershed** Management Plan
- Provide educational value and highly visible projects

#### **Eligible Projects:**

- Water quality treatment projects
- Stormwater rate and volume control projects
- Water reuse
- Smart irrigation controllers
- Flood storage projects
- Stormwater retrofit or reconstruction projects that exceed permit or VLAWMO water management standards

#### **Ineligible Projects:**

- Landscaping and decorative projects for recreational or aesthetic purposes
- Chemical treatment of aquatic vegetation (excluding alum or spent lime)
- Projects necessary to meet minimum permit requirements or VLAWMO water management standards
- Projects that have received funding from other VLAWMO grant programs in the same year
- Maintenance of awarded grant projects

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#### **Application Process:**

LL2 Grant funding is available to landowners including but not limited to municipalities, public agencies, private businesses, homeowner's associations, or nonprofit organizations. Projects within targeted areas listed in VLAWMO's Watershed Management Plan, Sustainable Lake Management Plans, or other feasibility reports will be prioritized. All applications are subject to VLAWMO scoring to determine funding eligibility and approval by the VLAWMO Technical Commission (TEC) and Board of Directors.

- 1. Contact staff to **schedule a pre-application meeting** to discuss project before submittal of a grant application.
- 2. **Schedule a site visit** with staff to review the proposed project area.
- 3. Complete a grant application and submit to staff listed on the grant application.
- 4. Applications are reviewed and scored by staff and/or consulting VLAWMO engineer if necessary.
- 5. Complete applications that meet the minimum criteria will be **presented** at the next VLAWMO TEC meeting and Board of Directors meeting per their meeting schedule.
- 6. VLAWMO will **notify applicant** of application status and next steps, including execution of a grant agreement.

#### **Grant Funding Agreement:**

Each grantee must enter into a grant agreement with VLAWMO defining the obligations of the grantee and VLAWMO, and expectations for project maintenance. The agreement also allows VLAWMO access to the project area for inspection and promotion of the project. The grant agreement must be signed by both parties prior to starting work on the project.

If the project is funded with a State of Minnesota grant, additional Technical Quality Assurance grant agreement standards may be necessary to fulfill state eligibility requirements. Where VLAWMO's policies differ from state standards, the grant agreement requirements with the state agency shall prevail.

#### **Reimbursement Steps:**

- 1. Execute grant agreement with VLAWMO.
- 2. After the project is complete, contact VLAWMO staff to request a final inspection of the project for verification it meets the approved plans. This must occur within 1.5 years from the date of grant approval.
- 3. Submit all **paid**, **zero remaining balance** invoices and receipts of project expenses for VLAWMO review. Final grant award amounts will be based on the completed work and total paid project amount.
- 4. If the above steps are completed and approved by staff, VLAWMO will mail a reimbursement check per the VLAWMO TEC's monthly meeting schedule.

#### **Program Details: Planning for Success**

#### Projects started prior to VLAWMO approval are not eligible. A grant application must be approved for funding, and the grant agreement must be signed by the applicant and VLAWMO prior to starting work. Eligible project costs are those only directly related to the proposed project, such as those associated with design and engineering, construction materials, labor, and drainage structures. Purchased tools and equipment are not eligible. Eligibility of materials is subject to VLAWMO approval. Grantee is responsible for securing any and all required permits, easements, and approvals prior to the start of the project. Grantees must complete their approved project and submit a grant reimbursement request within 1.5 years from date of approval unless the project is extended with VLAWMO approval. Grantee must agree to maintain the project area for a **minimum of 10 years.** The site may be inspected by VLAWMO staff during this time period to ensure compliance. Smart irrigation controllers to be used on pilot/test sites and enhanced street sweeping technology are eligible project costs. Work associated with design, installation, and labor of crucial infrastructure must be performed by an experienced professional. Final plans are subject to professional review and approval by consulting VLAWMO engineer to ensure design standards, specifications, and **Labor & Plant** outcomes meet program goals. Specifics VLAWMO may cover design costs through the Ramsey County Soil & Water Conservation Division depending on the project. At least 2 bids for construction of proposed projects must be submitted with the application. VLAWMO reserves the right to reject a project design or submitted bid for any reason. Erosion control projects must utilize natural erosion control material (i.e. non-plastic). For all projects, at least a 50% plant coverage must be native to Minnesota. VLAWMO encourages all vegetation used to be native species and adopts BWSR's Native Vegetation Establishment and Enhancement Guidelines by reference. VLAWMO reserves the right to withdraw or withhold funding for any project not completed in accordance with these guidelines or the terms of its executed grant agreement. The VLAWMO Board of Directors may shift grant funding amounts between LL1 & LL2 Landscape Grant program budgets. Any submitted information (applications, designs, cost estimates, bids, permits, studies, reports, and proof of expenditures) becomes part of the public record.

Vadnais Lake Area Water Management Organization 800 County Road E East Vadnais Heights, MN 55127 | www.VLAWMO.org | (651) 204-6070

# **LL2 Grant Application**



Submit completed application to: Lauren Sampedro lauren.sampedro@vlawmo.org

#### **Applicant Information:**

Applicant illiornation.	
Organization Name:	
Project Contact:	
Address:	
City/Township, State, Zip:	
Phone:	
Email:	
Project Summary:	PROJECT TYPE:
ESTIMATED TOTAL PROJECT COST	Water Quality Treatment
(Lowest responsible bid \$)	Ole monetary Data and
AMOUNT REQUESTED	Stormwater Rate and Volume Control
EXPECTED PROJECT COMPLETION	Groundwater
	Conservation
(Month, Year)	Other
If other, please describe the proposed project:	
Project Background:	
Describe the project location and	
water resources that will benefit from	
the project.	
What issues will be addressed with	
this project?	

Project Background: Continued			
Provide estimated water quality results, stormwater rate/volume reduction, or groundwater conservation benefits associated with the project.			
Describe the public education and outreach efforts or signage planned for the project.			
List or describe any partnerships or other forms of support for the project, including external funding sources.			
Project Specifications:			
TOTAL PROPERTY AREA (Acres)	Total PROJECT S (Sq Ft)	ZE	
IMPERVIOUS AREA DRAINING TO PROJECT (Sq Ft):	PERVIOUS AREA TO PROJECT (Sq		
Required Attachments  ⇒ Detailed final plan set of the quantitative outcomes of the At least 2 bids for construct	e proposed project that includes the e e project.	estimated,	

⇒ Detailed project budget estimate with itemized materials and costs that equal the

total project cost.

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#### **Non-Native Plant Guide**

Non-native plants are commonly found in the landscaping industry, but only a select few are eligible for reimbursement through VLAWMO's grant programs.



For any plant purchase, pay attention to the scientific (non-common) name on the label. Hybrids/cultivars will include 'single quotations' at the end of the names. Check this list to ensure that any cultivars sought are eligible for reimbursement.

#### **Grasses:**

- Bee Lawn mixes: Creeping Thyme, Dutch White Clover, Self-heal
- Fescue Lawn and "Lo-mow" seed mixes
- River Oats



#### Flowers/Forbs:



- Black-eyed Susan 'Goldsturm'
- Sedum 'Autumn Joy'
- Downy Wood Mint
- Dense/Marsh Blazing Star
- Bee Balm hybrids
- Russian Sage
- ueen of the Prairie

- Catmint
- Phantom Joe Pye Weed
- Royal Catchfly
- Mistflower
- Heartleaf Foamflower
- Black Cohosh/Bugbane
- Eastern Purple
   Coneflower

#### **Shrubs and Trees:**

- 'MN strain' Redbud
- Crabapple
- Gro-low Sumac
- Dogwood 'Arctic Fire'
- Serviceberry hybrids
- Hawthorn hybrids





#### **Lawns to Legumes**

#### Native Plants, Cultivars, and Non-Natives

Only insecticide-free Minnesota native plants are reimbursable under the Lawns to Legumes grant. Learn how to tell the difference between native plants, non-natives, and cultivars/hybrids.



#### What is a native plant?

Native plants are plant species that have been growing in Minnesota for a long time. They have beneficial relationships with their local weather, plants, pollinators, and soil. Native pollinators have evolved alongside native plants, and rely on them for nectar and pollen. Many native plants have deep roots that help clean pollutants from soil and make it healthier over time.

Native plant example: Wild yarrow (Achillea millefolium)



#### What is a cultivar?

Cultivars, nativars, and hybrids are native plants that have been modified by humans to look or grow a certain way. Cultivars may have fun names and flashy colors, but many provide limited nutrition for pollinators and don't support the environment in the ways that native plants do.

Cultivar example: 'Pink Grapefruit' Achillea millefolium (A cultivar of yarrow)

#### What is a non-native plant?

Non-native plants are plant species that have been brought by humans into an environment they are not naturally or historically found in. Because non-native plants have not had time to evolve and adapt within these new environments, they are less beneficial to pollinators and ecosystem health compared to native plants.

Non-native plant example: Zinnia flowers (Zinnia elegans)

#### **Funding Exceptions**

Are you installing a pollinator lawn? You can be reimbursed for fescue grasses, white clover, self-heal (Prunella), and creeping thyme for pollinator lawns.

Are you planting trees or shrubs? You can be reimbursed for Serviceberries or Hawthorns.

#### Native plants vs cultivars/hybrids

#### **Identifying cultivars**

- · Cultivars usually have single quotes around their name
- · Hybrids have an "X" in their name
- · Check the plant tag! Look for whimsical names
- · Shop at a native plant nursery instead of a chain store

#### Examples of cultivars/hybrids

- · Gaillardia 'Spintop Orange Halo'
- Spintop Orange Halo Blanket Flower
- · Gaillardia X grandiflora





Cultivar

'Cinderella'

Butterfly Flower

cultivar of Swamp Milkweed

(Asclepias incarnata)

Shopping from a local native plant nursery can make things

easier! Check out our Native

Plants Nurseries and Retailers

**Native** 

Butterfly Weed (Asclepias tuberosa)

#### **Spot the Native Plant!**

Sometimes it can be tricky to tell a native plant from a cultivar. Let's do a little practice!



'Grape Gumball' Monarda Cultivar X

Dymismake Haddi-Cnotian vectolism

Rattlesnake Master (Eryngium yuccifolium)

MN Native 

✓



Swamp Milkweed (Asclepias incarnata) MN Native ✓



'Prairifire' Crabapple
Cultivar X



'Firedance' Dogwood Cultivar ★



'Pinky Promise' Snowberry
Cultivar X



American Plum (Prunus americana)

MN Native 

✓



'Cinderella' Swamp Milkweed
Cultivar X



False Indigo (Baptisia australis) MN Native ⊗

VI. C.

# Tamarack Lake Alum Project



**November 13, TEC Meeting** 



#### Fall Project: Phase 1

- Phase 1 successfully completed
- · Board authorized payment of invoice received at October regular Board meeting

#### View from the field

- Smooth partner collaboration
- As project began,
   Tamarack Nature Center
   announced project on social
   media, posted temporary trail
   closures, and arranged to
   open the side gate each
   morning for Lake
   Restorations, Inc. (LRI)



#### View from the field

- Staging in prairie/trail area
- Truck able to drive down paved trail
- Carts used on boardwalk





#### View from the field

- Tarp used to prevent spills into surroundings
- Unloaded onto carts at boardwalk



#### View from the field

 Staging on dock to load two small boats with crews of two people per boat



#### View from the field

- Tanks allow lake water to be mixed with alum on the boat and delivered to the lake using a hose
- Onboard GPS tracks route and delivery



#### View from the field

Team coming in to reload





#### Project phase 1 completed

- 20,000 pounds applied, out of 78,580 pounds total
- Pre pH: 7.9-8.1
- Post pH: 6.5
- ~1 week post pH: 8.1
- pH range limit from MPCA: 6.0-9.0





## Project phase 1 completed

- 20,000 pounds applied, out of 78,580 pounds total
- Secchi disc depth pre: 0.2 m
- Secchi disc depth post: 0.5 m
- More than double depth increase with ~¹/₄ dose
- Preparation for phase 2 underway







#### **Technical Memorandum**

To: Vadnais Lake Area Water Management Organization (VLAWMO)

From: Greg Wilson, Barr Engineering Co. (Barr)

Subject: Oak Knoll Pond Spent Lime Treatment—Interim Results and Monitoring Recommendations

**Date:** October 14, 2024 **Project:** 23621480.00

#### 1 Project Background and Spent Lime Treatment Summary

Ponds that accumulate particles and phosphorus from stormwater runoff are a standard and widely applied stormwater best management practice. However, just as internal phosphorus loading occurs in lakes during warm summer periods when the potential for oxygen depletion is greatest, aging ponds have the potential to release more phosphorus than is captured during summer months. Spent lime, a water treatment byproduct of lime softening, had previously been shown to reduce sediment phosphorus release in the lab and in two experimental applications to half-acre ponds that occurred at nearby locations in 2021. Further research needs included the applicability of spent lime treatments for larger water bodies and the long-term cost-effectiveness compared to alum and other phosphorus control options.

The Vadnais Lake Area Water Management Organization (VLAWMO) and the City of White Bear Lake (WBL) hired Barr for completion of an in-pond spent lime demonstration treatment feasibility study for Oak Knoll Pond (also known as Wood Lake), which is a 4.5-acre pond located in White Bear Lake that has an average depth of 5.7 feet. Prior to the project, one year of water quality and sediment monitoring data existed from 2017, which indicated that sediment phosphorus release could limit its stormwater treatment capacity during the summer months.

Barr published a feasibility study in April 2023, which included specific recommendations for spent lime applications to two pond treatment zones of Oak Knoll Pond, along with recommendations for pre- and post-treatment water quality monitoring from the same year as the spent lime applications to provide a better measure of the water quality benefit. Barr subsequently issued a request for quotes from qualified contractors to perform the spent lime treatment on Oak Knoll Pond.

At its August 2023 meeting, VLAWMO entered into an agreement with Erosion Works to apply spent lime, obtained from the White Bear Lake water treatment facility to Oak Knoll Pond to control sediment phosphorus release. The contract called for 14 loads of spent lime applied to the shallower zone (Zone 1) of the pond and eight loads of spent lime applied to the deeper zone (Zone 2) of the pond, as shown in Figure 1.

This memorandum is intended to further describe the preliminary results of the spent lime treatment, including the water quality response in Oak Knoll Pond to-date, and provide recommendations for continued water quality monitoring for the next year.

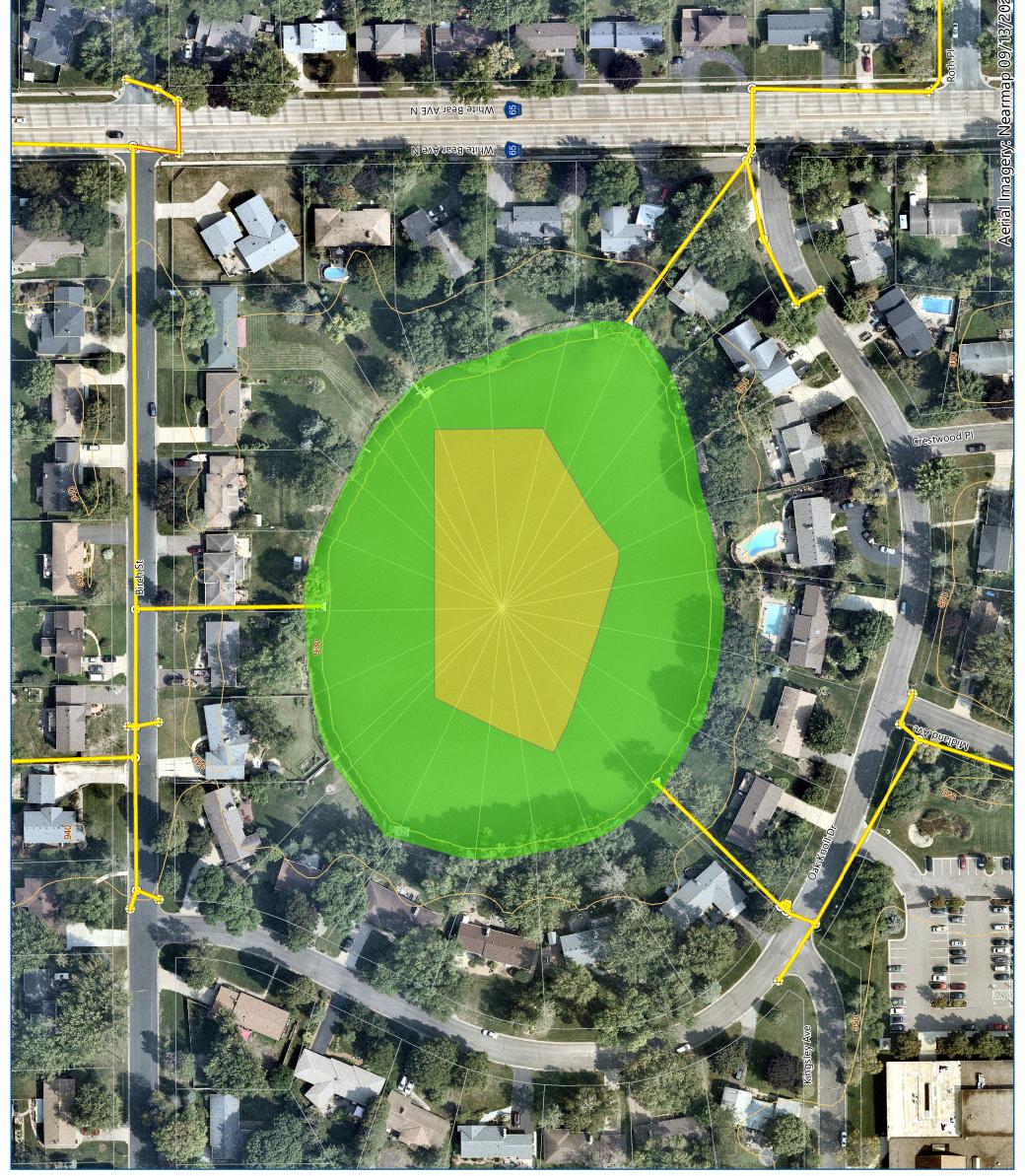
Storm Sewer Pipe Easement

10-Foot Elevation Contour

| Parcel Boundary
| Spent Lime Treatment Zones |
| Zone 1 |
| Zone 2 |
| Zone 2 |
| ARRR

| 100 50 0 100 Feet

OAK KNOLL POND
SPENT LIME TREATMENT
Vadnais Lakes Area
Watershed Management
Organization



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Erosion Works commenced work on the project and applied three loads of spent lime to the shallower zone (Zone 1) of the pond during the latter half of August 2023 and four loads to the deeper zone (Zone 2) between late October and the middle of November 2023. The spent lime applications resumed in the spring of 2024 with the remaining four loads applied to the deeper zone by mid-May, followed by the remaining eleven loads applied to the shallower zone between mid-May and the end of July. More specifically, single loads of spent lime were applied to each of the respective treatment zones on the following dates:

- 8/23/23—Zone 1
- 8/28/23—Zone 1
- 8/30/23—Zone 1
- 10/30/23—Zone 2
- 11/1/23—Zone 2
- 11/6/23—Zone 2
- 11/10/23—Zone 2
- 4/9/24—Zone 2
- 4/11/24—Zone 2
- 5/8/24—Zone 2
- 5/9/24—Zone 2
- 5/14/24—Zone 1
- 5/23/24—Zone 1
- 6/12/24—Zone 1
- 6/20/24—Zone 1
- 6/26/24—Zone 1
- 6/27/24—Zone 1
- 7/10/24—Zone 1
- 7/12/24—Zone 1
- 7/16/24—Zone 1
- 7/23/24—Zone 17/26/24—Zone 1

#### 2 Water Quality Monitoring Results To-Date

VLAWMO staff have completed pond water quality monitoring efforts since the spring of 2023 that provide insight into how the spent lime applications resulted in baseline water quality changes to Oak Knoll Pond. Figure 2 shows how surface and bottom-water total phosphorus concentrations have changed during 2023 and 2024. In general, it appears that the spent lime treatment has dropped the total phosphorus concentrations in Oak Knoll Pond by approximately half, both at the surface and bottom of the pond, with no sign of internal phosphorus release since the deeper zone (Zone 2) applications began. In addition, Secchi disc water transparency readings doubled (from 1.5 to 3.0 feet) in the spring and early summer of 2024 as the spent lime applications concluded. Late July and August transparency readings dropped to 1.5 feet following several wet weather runoff events but fall transparency readings returned to 3 feet.

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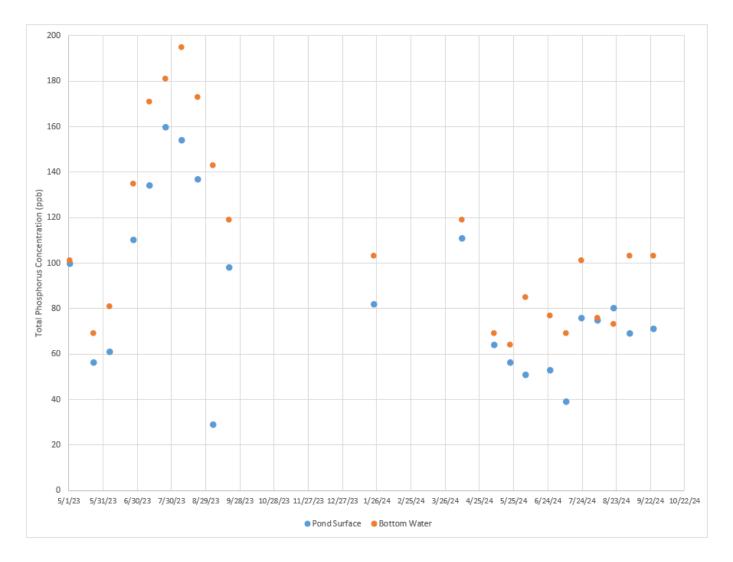


Figure 2 Oak Knoll Pond Water Quality Pre- and Post-Treatment

#### 3 Future Water Quality Monitoring Recommendations

It is recommended that VLAWMO staff (except where indicated) continue to monitor the pond water quality throughout the 2025 growing season (May and September), following previous recommendations for monitoring parameters, locations, and frequencies, as summarized below. It is also recommended that Barr staff complete another round of sediment monitoring in the fall of 2025, for comparison with the baseline monitoring completed for the feasibility study.

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#### Recommended monitoring parameters/frequency for Oak Knoll Pond treatment

Parameters Parameters Parameters	Frequency
Pond profile field measurements (DO, temperature, pH, conductivity)	Bi-weekly
Pond surface water TP, Secchi, and stage	Bi-weekly
Pond bottom water TP	Bi-weekly
Pond bottom water Iron	Bi-weekly
Pond sediment monitoring (Barr)	Once, Fall 2025