

## **VLAWMO TECHNICAL COMMISSION MEETING**

**8:00 AM August 9, 2023**

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

Action items: ☼

- I. **Call to Order: 8:00 am**
- II. **Approval of Agenda**
- III. **Approval of Minutes (July 12, 2023)**
- IV. **Administration & Operations**
  - a. Financial report for August and authorization for payment ☼ – Phil **Pg. 6**
  - b. August TEC report to the Board ☼ – Phil **Pg. 14**
- V. **Programs**
  - a. LL1 2023-05 Swanson Shoreline ☼ - Lauren **Pg. 21**
  - b. Outreach updates: MN Water Steward capstone, groundwater conservation - Nick **Pg. 15**
  - c. VLAWMO 40<sup>th</sup> Anniversary Conservation Celebration Aug 24 - Nick **Pg. 15**
  - d. Update on approved 2024 VLAWMO budget – Phil **Pg. 16**
- VI. **Projects - Dawn**
  - a. Update on Wilkinson deep-water wetland restoration project bid process **Pg. 16**
  - b. Wilkinson deep-water wetland project pre-construction remote-camera survey **Pg. 18**
  - c. Gilfillan aquatic vegetation survey completed **Pg. 19**
  - d. SEH biochar analysis and next 319 grant round **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: September 13, Board: August 23**
- XIII. **Adjourn**

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### **Upcoming Events:**

Native Plant tour at WB Montessori: Aug 9

Neighborhood BMP tour: Aug 17

VH Heritage Days: Aug 19

40<sup>th</sup> Anniversary Celebration with RCSWCD: Aug 24

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**Vadnais Lake Area Water Management Organization  
Technical Commission (TEC) Minutes  
July 12, 2023  
Vadnais Heights City Hall, Council Chambers  
800 County Road E East, Vadnais Heights, MN 55127**

**Commission Members Present:**

Nick Ousky	Vadnais Heights (VH) (Alternate)
Gloria Tessier	Gem Lake (GL)
Jami Philip	White Bear Township (WBT)
Susan Miller	North Oaks (NO)
Terry Huntrods	White Bear Lake (WBL)

**Absent:** Andy Nelson (LL)

**Others in attendance:** Phil Belfiori, Brian Corcoran, Lauren Sampedro, Nick Voss, Dawn Tanner (VLAWMO staff), Jeremy Erickson (SPRWS)

**I. Call to Order**

Chair Tessier called the meeting to order at 7:59 am.

**II. Approval of Agenda**

It was moved by Commissioner Huntrods and seconded by Commissioner Miller to approve the July 12, 2023 TEC agenda Vote: all aye. Motion passed.

**III. Approval of Minutes (June 14, 2023)**

It was moved by Commissioner Miller and seconded by Commissioner Ousky to approve the June 14 meeting minutes as presented. Vote: all aye. Motion passed.

**IV. Administration & Operations**

**A. Financial Report for July and Authorization for Payment**

Administrator Belfiori outlined the July finance report, which included expenses related to special CIP projects like the spent lime and Wilkinson deep water wetland projects, and a soil health grant project reimbursement. He recommended payment of the July expenses.

It was moved by Commissioner Miller and seconded by Commissioner Huntrods to approve the July financial report and authorize payment. Vote: all aye. Motion passed.

## V. Programs

### A. 40<sup>th</sup> Anniversary Campaign Update

Voss provided coasters commemorating VLAWMO's 40<sup>th</sup> anniversary to the TEC and noted that the VLAWMO website includes a 40<sup>th</sup> anniversary campaign with a series of six events. He then summarized the upcoming August 24<sup>th</sup> celebration at Vadnais-Sucker Lake Regional Park-pavilion #1. He noted that Stephanie McNamara's retirement recognition will be scheduled for 3:30pm. He also summarized some of the other activities that are planned for the August 24<sup>th</sup> event, such as an aquatic macroinvertebrate activity, yard games, a State climatology speaker, sandwiches, and mini restoration tours in the park. He invited the TEC to attend.

### B. SHG 2023-02 McCarthy Raingarden

Sampedro explained the grant application submitted from a landowner located in White Bear Lake. The project is located in the target priority zone for stormwater volume reduction and drains to Lambert Creek. The project is a downspout raingarden with a mixed sun and shade planting plan. Sampedro recommended approval of the application at 75% up to \$1,250.

It was moved by Commissioner Ousky and seconded by Commissioner Huntrods to approve SHG-2023-02 McCarthy Raingarden. Vote: all aye. Motion passed.

### C. LL1 2023-04 Hill Shoreline

Sampedro explained the grant application submitted from a landowner on the southeast side of Birch Lake on Birch Lake Blvd in White Bear Lake. The application motivation was influenced by an adjacent neighbor who completed a previous VLAWMO grant shoreline restoration. The project proposal includes native aquatic and terrestrial vegetation, a shoreline buffer of about 11ft in width (110 linear ft of shoreline), and an upland buffer of about 2,400 square feet. Existing sand and turf would be removed and replaced with a soil amendment and native species. Staff recommended approval at 50% up to \$5,000.

Commissioner Miller inquired about the cost share program, whether VLAWMO is at a budget that it would typically expect for this time of year. Sampedro affirmed that the current trend is expected due to the time it takes for homeowners to get applications together and the competitiveness in reserving contractors.

It was moved by Commissioner Huntrods and seconded by Commissioner Ousky to approve LL1 2023-04 Hill Shoreline. Vote: all aye. Motion passed.

## VI. Projects

### A. East Vadnais Lake Subwatershed Resiliency Study

Sampedro summarized the East Vadnais Lake Subwatershed resiliency study in partnership with Ramsey County, the City of Vadnais Heights, and Saint Paul Regional Water Services. The project is focused on flood reduction and water quality improvements in the area outlined on the map expressed in the packet. The partners have signed a MOU to complete the study with shared funding contributions, which is expected to total about \$70,000. Study proposals are due by the end of July and will be scored in the first week of August. The full study is expected to be completed in 2024.

Commissioner Miller asked whether there are homeowners experiencing basement flooding in the project area, or if there's current street flooding issues. Sampedro confirmed that the intersection of Centerville Rd and Vadnais Blvd is a persistent spot for flooding.

### B. Spent Lime project at Oak Knoll Pond

Tanner explained that the City of White Bear Lake City Council considered the spent lime quote and contract documents at their July 11, 2023 council meeting. She said staff expect to receive news from the City on if the project can move forward later this morning.

### C. Wilkinson Deep-water Wetland Restoration Project Bid Process

Tanner announced that the bid is available to interested contractors. An in-person mandatory pre-bid meeting is occurring at the end of July.

### D. Amelia Flowering Rush Project

Tanner explained that the MN DNR has requested continued monitoring for flowering rush at Amelia Lake. After a period of 5 years with no flowering rush the DNR will consider delisting it from Amelia Lake. VLAWMO is working with Ramsey County Soil and Water Conservation Division on the monitoring and both entities value the learning opportunity for this unique invasive species treatment task.

### E. Polar Lakes Park Stormwater Reuse Feasibility Study

Corcoran introduced the stormwater reuse project that is occurring in partnership with White Bear Township. The VLAWMO BOD approved moving forward with the feasibility study at the June Board meeting. The Polar Lakes park area can use up to 6 million gallons of water per year, and the study is focused on the feasibility of using a nearby mitigation wetland to reduce potable water use. The feasibility study will determine

the maximum drawdown of the wetland and the wetland recharge, analysis of existing irrigation and irrigation needs, water quality data, available water storage, and more. VLAWMO and White Bear Township are splitting the cost 50/50 for the feasibility study through a signed MOU. The completed study will be presented to the Township and VLAWMO Board to discuss findings and future direction.

Earlier in the spring of 2023 the TEC also approved smart irrigation controllers for this park, which are now installed.

Commissioner Miller provided support for using surface water runoff rather than groundwater drinking water to water the fields.

**I. Commissioner Reports**

None

**II. NOHOA**

Commissioner Miller inquired about the carp removal in Deep Lake, and asked if the carp removal may be already be impacting the water quality for the better.

Tanner noted that the clarity increase is likely due to vegetation taking up the nutrients in the lake, and the aquatic vegetation is healthier with greater ability to retain lake nutrients. She noted that the changes are likely due to two years of continued carp removal and the time that aquatic vegetation has had to recover in carp's absence.

**III. Ramsey Soil & Water Conservation Division**

None

**IV. St. Paul Regional Water Services**

Jeremy Erickson reported that the Highland water tower open house is the weekend of July 14-15.

**V. Public Comment**

None

**VI. Next Meetings:**

Next TEC meeting August 9<sup>th</sup>. Next BOD meeting August 23<sup>rd</sup>.

**XIII. Adjourn**

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

Minutes compiled by Nick Voss.

# VLAWMO Finance Summary: August 2023

Aug-23		Actual 8/1/23	Actual to Date	2023 Budget	Carry over from 2022 to 2023	Remaining in Budget	2023 Available	Act vs. Budget
<b>BUDGET #</b>	<b>INCOME</b>							
<b>5.11</b>	Storm Water Utility	\$581,750	\$592,641	\$1,090,887	\$0	\$498,246	\$1,090,887	54%
<b>5.12</b>	Service Fees	\$0	\$0	\$200	\$0	\$200	\$200	0%
<b>5.13</b>	Interest + mitigation acct	\$6,043	\$28,280	\$1,000	\$0	(\$27,280)	\$1,000	2828%
<b>5.14</b>	Misc. income - WCA admin & other	\$1,710	\$8,209	\$3,000	\$0	(\$5,209)	\$3,000	274%
<b>5.15</b>	Other Income Grants/loan	\$0	\$69,693	\$385,284	\$0	\$315,591	\$385,284	18%
<b>5.16</b>	Transfer from reserves	\$0	\$0	\$294,364	\$231,999	\$526,363	\$526,363	0%
	<b>TOTAL</b>	<b>\$589,503</b>	<b>\$698,823</b>	<b>\$1,774,735</b>	<b>\$231,999</b>	<b>\$1,307,911</b>	<b>\$2,006,734</b>	<b>39%</b>
<b>EXPENSES</b>								
<b>3.1</b>	<b>Operations &amp; Administration</b>							
<b>3.110</b>	Office - rent, copies, post tel supplies	\$2,140	\$14,935	\$28,181	\$0	\$13,246	\$28,181	53%
<b>3.120</b>	Information Systems	\$1,439	\$11,231	\$33,300	\$0	\$22,069	\$33,300	34%
<b>3.130</b>	Insurance	\$9,245	\$9,406	\$7,571	\$0	(\$1,835)	\$7,571	124%
<b>3.141</b>	Consulting - Audit	\$0	\$10,585	\$9,000	\$0	(\$1,585)	\$9,000	118%
<b>3.142</b>	Consulting - Bookkeeping	\$46	\$243	\$1,500	\$0	\$1,257	\$1,500	16%
<b>3.143</b>	Consulting - Legal	\$0	\$723	\$6,000	\$0	\$5,277	\$6,000	12%
<b>3.144</b>	Consulting - Eng. & Tech.	\$640	\$2,178	\$30,000	\$15,000	\$42,822	\$45,000	5%
<b>3.150</b>	Storm Sewer Utility	\$0	\$2,978	\$15,000	\$0	\$12,022	\$15,000	20%
<b>3.160</b>	Training (staff/board)	\$940	\$8,809	\$13,250	\$0	\$4,441	\$13,250	66%
<b>3.170</b>	Misc. & mileage	\$444	\$1,459	\$6,300	\$0	\$4,841	\$6,300	23%
<b>3.191</b>	Administration - staff	\$31,403	\$233,635	\$422,353	\$0	\$188,718	\$422,353	55%
<b>3.192</b>	Employer Liability	\$9,475	\$68,170	\$122,428	\$0	\$54,258	\$122,428	56%
<b>3.2</b>	<b>Monitoring and Studies</b>							
<b>3.210</b>	Lake and Creek lab analysis	\$2,510	\$4,044	\$18,000	\$0	\$13,956	\$18,000	22%
<b>3.220</b>	Equipment	\$0	\$928	\$3,000	\$1,000	\$3,072	\$4,000	23%
<b>3.230</b>	Wetland assessment & management	\$0	\$0	\$0	\$10,000	\$10,000	\$10,000	0%
<b>3.240</b>	Watershed planning /special study	\$0	\$0	\$10,000	\$5,000	\$15,000	\$15,000	0%
<b>3.3</b>	<b>Education and Outreach</b>							
<b>3.310</b>	Public Education	\$0	\$2,131	\$6,000	\$0	\$3,869	\$6,000	36%
<b>3.320</b>	Marketing	\$436	\$4,021	\$15,000	\$9,500	\$20,479	\$24,500	16%
<b>3.330</b>	Community Blue Ed Grant	\$0	\$1,500	\$8,000	\$0	\$6,500	\$8,000	19%
<i>Total Core functions: Ops, Monitoring, Education</i>		<i>\$58,718</i>	<i>\$376,976</i>	<i>\$754,883</i>	<i>\$40,500</i>	<i>\$418,407</i>	<i>\$795,383</i>	<i>47%</i>
<b>Capital Improvement Projects and Programs</b>								
<b>3.4</b>	<b>Subwatershed Activity</b>							
<b>3.410</b>	Gem Lake	\$0	\$0	\$15,000	\$10,000	\$25,000	\$25,000	
<b>3.420</b>	Lambert Creek	\$3,024	\$5,107	\$55,000	\$0	\$49,893	\$55,000	9%
<b>3.421</b>	Lambert Lake Loan	\$0	\$19,284	\$38,568	\$0	\$19,284	\$38,568	50%

3.425	Goose Lake	\$5,151	\$18,095	\$92,500	\$0	\$74,405	\$92,500	20%
3.430	Birch Lake	\$0	\$0	\$20,000	\$0	\$20,000	\$20,000	0%
3.440	Gilf Black Tam Wilk Amelia	\$12,389	\$85,517	\$157,500	\$43,000	\$114,983	\$200,500	43%
3.450	Pleasant Charley Deep	\$10,880	\$22,440	\$48,000	\$30,000	\$55,560	\$78,000	29%
3.460	Sucker Vadnais	\$0	\$1,857	\$35,000	\$28,000	\$61,143	\$63,000	3%
3.48	<b>Programs</b>							
3.480	Soil Health Grant	\$1,250	\$1,818	\$8,000	\$0	\$6,182	\$8,000	23%
3.481	Landscape 1	\$5,000	\$5,000	\$30,000	\$6,263	\$31,263	\$36,263	14%
3.482	Landscape 2/BWSR WBF	\$675	\$2,251	\$35,000	\$36,636	\$69,385	\$71,636	3%
3.483	Project Research & feasibility	\$0	\$0	\$5,000	\$0	\$5,000	\$5,000	0%
3.485	Facilities Maintenanc/ Pub. Ditch Main.	\$537	\$7,749	\$90,000	\$37,600	\$119,851	\$127,600	6%
3.5	<b>Regulatory</b>							
3.510	Engineer Plan review	\$0	\$0	\$5,000	\$0	\$5,000	\$5,000	0%
	<i>Total CIP &amp; Program</i>	\$38,906	\$169,118	\$634,568	\$191,499	\$656,949	\$826,067	20%
	<b>Total of Core Operations &amp; CIP</b>	<b>\$97,624</b>	\$546,094	\$1,389,451	\$231,999	<b>\$1,075,356</b>	\$1,621,450	<b>34%</b>

Fund Balance	7/1/2023	8/1/2023
4M Account	\$688,652	\$1,216,296
4M Plus Savings	\$233,845	\$234,866
Total	\$922,497	\$1,451,162

Restricted funds	8/1/2023
Mitigation Savings	\$21,016
Term Series	\$0

**Vadnais Lake Area Water Management Organization**  
**Check Detail**  
**July 13 through August 9, 2023**

11:14 AM  
08/01/2023

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Check	eft	07/24/2023	Reliance Standard		Checking - 1987		-312.17
				Insurance Benefit		-91.50	91.50
				Insurance Benefit		-220.67	220.67
TOTAL						-312.17	312.17
Check	eft	08/01/2023	US Bank		Checking - 1987		-46.09
				3.142 · Bookkeeping help		-46.09	46.09
TOTAL						-46.09	46.09
Check	5590	07/14/2023	Barr Engineering Co		Checking - 1987		-2,169.50
				Oak Knoll		-2,169.50	2,169.50
TOTAL						-2,169.50	2,169.50
Check	5591	08/09/2023	city of North Oaks		Checking - 1987		-1,912.25
				3.440 · Gilfillan Black Tamarack Wilkin		-1,912.25	1,912.25
TOTAL						-1,912.25	1,912.25
Check	5592	08/09/2023	Brian Corcoran		Checking - 1987		-232.48
				3.170 · Misc. & mileage		-232.48	232.48
TOTAL						-232.48	232.48
Check	5593	08/09/2023	Lauren Sampedro		Checking - 1987		-36.29
				3.170 · Misc. & mileage		-36.29	36.29
TOTAL						-36.29	36.29
Check	5594	08/09/2023	Nicholas Voss		Checking - 1987		-16.14
				3.170 · Misc. & mileage		-15.07	15.07
				3.320 · Marketing		-1.07	1.07
TOTAL						-16.14	16.14
Check	5595	08/09/2023	Dawn Tanner		Checking - 1987		-160.00
				3.170 · Misc. & mileage		-160.00	160.00
TOTAL						-160.00	160.00
Check	5596	08/09/2023	Sisoka Duta		Checking - 1987		-420.00
				3.320 · Marketing		-420.00	420.00
TOTAL						-420.00	420.00
Check	5597	08/09/2023	Kelli Wendland		Checking - 1987		-5,000.00
				3.481 · Landscape 1 - cost-share		-5,000.00	5,000.00
TOTAL						-5,000.00	5,000.00

Check	5598	08/09/2023	City of Vadnais Heights	Checking - 1987		<b>-2,139.72</b>
				Rent	-1,715.00	1,715.00
				Phone/Internet/Machine Overhead	-305.00	305.00
				Postage	-71.19	71.19
				Copies	-48.53	48.53
TOTAL					-2,139.72	2,139.72
Check	5599	08/09/2023	Ramsey County	Checking - 1987		<b>-675.00</b>
				3.482 · Landscape 2	-675.00	675.00
TOTAL					-675.00	675.00
Check	5600	08/09/2023	Barr Engineering Co	Checking - 1987		<b>-8,597.54</b>
				3.440 · Gilfillan Black Tamarack Wilkin	-4,110.01	4,110.01
				3.440 · Gilfillan Black Tamarack Wilkin	-1,506.50	1,506.50
				Oak Knoll	-2,981.03	2,981.03
TOTAL					-8,597.54	8,597.54
Check	5601	08/09/2023	SEH	Checking - 1987		<b>-640.33</b>
				3.144 · Eng. & Tech.	-640.33	640.33
TOTAL					-640.33	640.33
Check	5602	08/09/2023	RMB Environmental Laboratories, Inc.	Checking - 1987		<b>-2,685.00</b>
				3.210 · Lake & Creek lab analysis	-55.00	55.00
				3.210 · Lake & Creek lab analysis	-396.00	396.00
				3.210 · Lake & Creek lab analysis	-362.00	362.00
				LL VLAWMO cash match	-175.00	175.00
				3.210 · Lake & Creek lab analysis	-441.00	441.00
				3.210 · Lake & Creek lab analysis	-858.00	858.00
				3.210 · Lake & Creek lab analysis	-55.00	55.00
				3.210 · Lake & Creek lab analysis	-343.00	343.00
TOTAL					-2,685.00	2,685.00
Check	5603	08/09/2023	League of MN Cities Insurance Trust WC	Checking - 1987		<b>-3,460.00</b>
				3.130 · Insurance	-3,460.00	3,460.00
TOTAL					-3,460.00	3,460.00
Check	5604	08/09/2023	League of MN Cities Insurance Trust P & C	Checking - 1987		<b>-5,785.00</b>
				3.130 · Insurance	-5,785.00	5,785.00
TOTAL					-5,785.00	5,785.00
Check	5605	08/09/2023	Houston Engineering, Inc	Checking - 1987		<b>-8,157.50</b>
				3.420 · Lambert Creek Restoration	-2,848.75	2,848.75
				3.485 · Facilities & Maintenance	-537.50	537.50
				Wilk 319 cash match \$182,137	-4,771.25	4,771.25
TOTAL					-8,157.50	8,157.50
Check	5606	08/09/2023	Metro - Inet	Checking - 1987		<b>-1,439.00</b>
				IT Support	-1,439.00	1,439.00

TOTAL			-1,439.00	1,439.00
<b>Check 5607</b>	<b>08/09/2023</b>	<b>carp solutions</b>		
			<b>Checking - 1987</b>	<b>-10,880.00</b>
			3.450 · Pleasant Charley Deep	-10,880.00
TOTAL			<u>-10,880.00</u>	<u>10,880.00</u>
<b>Check 5608</b>	<b>08/09/2023</b>	<b>Press Publications</b>		
			<b>Checking - 1987</b>	<b>-88.93</b>
			3.440 · Gilfillan Black Tamarack Wilkin	-88.93
TOTAL			<u>-88.93</u>	<u>88.93</u>
<b>Check 5609</b>	<b>08/09/2023</b>	<b>City of White Bear Lake</b>		
			<b>Checking - 1987</b>	<b>-40,566.15</b>
			payroll	-31,403.24
			Administration FICA	-2,282.97
			Administration PERA	-2,355.24
			Insurance Benefit	-4,479.78
			Admin payroll processing	-44.92
TOTAL			<u>-40,566.15</u>	<u>40,566.15</u>
<b>Check 5610</b>	<b>08/09/2023</b>	<b>Charley Lake Homeowners Assoc</b>		
			<b>Checking - 1987</b>	<b>-1,250.00</b>
			3.480 · Soil Health Grant	-1,250.00
TOTAL			<u>-1,250.00</u>	<u>1,250.00</u>

**Vadnais Lake Area Water Management Organizatio**  
**Profit & Loss**  
**July 13 through August 9, 2023**

11:11 AM

08/01/2023

Cash Basis

Jul 13 - Aug 9, 23

Ordinary Income/Expense

Income

Misc. 1,710.00

5.1 · Income

5.11 · Storm Water Utility 581,749.79

5.13 · Interest 6,043.69

Total 5.1 · Income 587,793.48

Total Income 589,503.48

Gross Profit 589,503.48

Expense

3.1 · Administrative/Operations

3.110 · Office

Copies 48.53

Phone/Internet/Machine Overhead 305.00

Postage 71.19

Rent 1,715.00

Total 3.110 · Office 2,139.72

3.120 · Information Systems

IT Support 1,439.00

Total 3.120 · Information Systems 1,439.00

3.130 · Insurance 9,245.00

3.142 · Bookkeeping help 46.09

3.144 · Eng. & Tech. 640.33

3.160 · Training (staff/board) 940.00

3.170 · Misc. & mileage 443.84

3.191 · Employee Payroll

payroll 31,403.24

Total 3.191 · Employee Payroll 31,403.24

3.192 · Employer Liabilities

Admin payroll processing 44.92

Administration FICA 2,282.97

Administration PERA 2,355.24

Insurance Benefit 4,791.95

Total 3.192 · Employer Liabilities 9,475.08

Total 3.1 · Administrative/Operations 55,772.30

3.2 · Monitoring and Studies

3.210 · Lake & Creek lab analysis 2,510.00

Total 3.2 · Monitoring and Studies 2,510.00

3.3 · Education and Outreach

3.320 · Marketing 435.97

Total 3.3 · Education and Outreach 435.97

3.4 · Capital Imp. Projects/Programs

<b>3.420 · Lambert Creek Restoration</b>	
LL VLAWMO cash match	175.00
<b>3.420 · Lambert Creek Restoration - Other</b>	<u>2,848.75</u>
<b>Total 3.420 · Lambert Creek Restoration</b>	<u>3,023.75</u>
<b>3.425 · Goose Lake</b>	
Oak Knoll	<u>5,150.53</u>
<b>Total 3.425 · Goose Lake</b>	<u>5,150.53</u>
<b>3.440 · Gilfillan Black Tamarack Wilkin</b>	
Wilk 319 cash match \$182,137	4,771.25
<b>3.440 · Gilfillan Black Tamarack Wilkin - Other</b>	<u>7,617.69</u>
<b>Total 3.440 · Gilfillan Black Tamarack Wilkin</b>	<u>12,388.94</u>
<b>3.450 · Pleasant Charley Deep</b>	<u>10,880.00</u>
<b>Total 3.4 · Capital Imp. Projects/Programs</b>	<u>31,443.22</u>
<b>3.48 · Programs</b>	
<b>3.480 · Soil Health Grant</b>	1,250.00
<b>3.481 · Landscape 1 - cost-share</b>	5,000.00
<b>3.482 · Landscape 2</b>	675.00
<b>3.485 · Facilities &amp; Maintenance</b>	<u>537.50</u>
<b>Total 3.48 · Programs</b>	<u>7,462.50</u>
<b>Total Expense</b>	<u>97,623.99</u>
<b>Net Ordinary Income</b>	<u>491,879.49</u>
<b>Net Income</b>	<u><u>491,879.49</u></u>

**Vadnais Lake Area Water Management Organization**  
**Custom Transaction Detail Report**  
 May 1 through July 1, 2023

11:09 AM  
 08/01/2023  
 Accrual Basis

Type	Date	Num	Name	Memo	Account	Clr	Split	Amount	Balance
May 1 - Jul 1, 23									
Credit Card Charge	05/02/2023		Google*SVCAPPS_VLAWM		US Bank CC	√	WEB	42.00	42.00
Credit Card Charge	05/08/2023		adobe *photography plan		US Bank CC	√	Software	9.99	51.99
Credit Card Charge	05/11/2023		ESRI	ArcGIS credits	US Bank CC	√	IT Systems - Hardware	720.00	771.99
Transfer	05/22/2023			Funds Transfer	US Bank CC	√	Checking - 1987	-444.81	327.18
Credit Card Charge	05/25/2023		Adobe "Creative Cloud		US Bank CC	√	Software	32.20	359.38
Credit Card Charge	05/28/2023		hologram	account refill	US Bank CC	√	Software	30.00	389.38
Credit Card Charge	05/30/2023		print for change	WMO Brochures	US Bank CC	√	3.320 · Marketing	186.00	575.38
Credit Card Charge	06/02/2023		Google*SVCAPPS_VLAWM		US Bank CC	√	WEB	42.00	617.38
Credit Card Charge	06/06/2023		Speedy	mulch remnent	US Bank CC	√	3.460 · Sucker Vadnais	23.96	641.34
Credit Card Charge	06/07/2023		Speedy	mulch remnent	US Bank CC	√	3.460 · Sucker Vadnais	29.95	671.29
Credit Card Charge	06/09/2023		Speedy	mulch remnent	US Bank CC	√	3.460 · Sucker Vadnais	23.96	695.25
Credit Card Charge	06/14/2023		Crestline	coasters	US Bank CC	√	3.320 · Marketing	353.19	1,048.44
Credit Card Charge	06/15/2023		adobe *photography plan		US Bank CC	√	Software	9.99	1,058.43
Credit Card Charge	06/20/2023		Frattalone Companies	staples remnent	US Bank CC	√	3.460 · Sucker Vadnais	8.99	1,067.42
Credit Card Charge	06/20/2023		TO Retail	plants remnant	US Bank CC	√	3.460 · Sucker Vadnais	85.50	1,152.92
Transfer	06/20/2023			Funds Transfer	US Bank CC	√	Checking - 1987	-1,010.20	142.72
Credit Card Charge	06/26/2023		Adobe "Creative Cloud		US Bank CC	√	Software	32.20	174.92
Credit Card Charge	06/27/2023		Prairie Moon Nursery	wilkinson plants	US Bank CC	√	3.440 · Gifillan Black Tamarack Wilkin	1,564.64	1,739.56
Credit Card Charge	06/29/2023		REI	dawn - water jug	US Bank CC	√	3.460 · Sucker Vadnais	19.95	1,759.51
Credit Card Charge	06/30/2023		Meta	neighborhood tours post	US Bank CC		3.320 · Marketing	12.93	1,772.44
								<b>1,772.44</b>	<b>1,772.44</b>
May 1 - Jul 1, 23									

**TEC Report to the Board  
August 2023**

Programs & Projects	Effort Level	Completion Date	Comments				
	LOW						
	MED						
	HIGH						
<b>Projects</b>				<b>Administration &amp; Operation</b>			
319 Biochar			Monitoring ongoing and final report to MPCA in development process	Audit		2022/2023	2022 audit approved by Board at the April meeting.
Oak Knoll Pond/Wood Lake		ongoing	In discussions with contractor on final contract language.	Budget		for 2024 budget	VLAWMO Board approved 2024 budget at June 28 meeting.
Public Ditch Maintenance		ongoing	Planning fall cleaning	Personnel /HR		ongoing	Mid year review and discussion on employee work objectives complete
MPCA 319 /Wilkinson Lake BMP		2021-24	Bids for construction contractor will be opened on Aug 3rd. Will provide update at meeting .	SSU		ongoing	2023 SSU certifications is anticipated for consideration at the August VLAWMO Board meeting
Pleasant Lake Carp Management		2022-28	Spring removal complete. Biomass estimate will be done later in the season, and a 5-year plan is requested by VLAWMO from Carp Solutions to bring to the Board by the end of the year.	Strategic /watershed planning		2023	Starting discussion this month on strategic planning for late 23 /early and mid 24 that will lead into development of 10 year watershed plan starting in 2024
<b>Programs</b>				<b>FINANCIAL SUMMARY as of 8/1/2023</b>			
City/Township MS4		June	Distributing existing MS4 education materials, customization by request. Vadnais Heights custom raingarden guide for Bridgewood Park Raingarden.				
Education/Outreach		August-Sept	Public boothing active such as White Bear Lake Marketfest and Vadnais Heights Heritage Days. Smart irrigation campaign continues, addition of WBT promo photos, article printed in WB Press July 26, 2023. Planning 40th Anniversary Campaign celebration event for August 24th, 2023, composing a video consisting of interviews of past and present VLAWMO admins and Board chair.	4M Account (1.10)	4M Plus (1.23)	Total	
Website		June-August	Website mock-up completed, final renovated sight expected in August, 2023.	\$1,216,296	\$234,865	\$1,451,161	
WAV		June-Sept	Minnesota Water Steward Megan Sigmon-Olsen capstone project has completed the purple loosertrife component of the project. Megan is now conducting tours of her VLAWMO grant-funded raingarden, hosting education materials in neighborhood Night to Unite, and issuing a mailing letter to the neighborhood. Summer tours of past cost-share projects and WB Montessori native plantings.				
Cost Share & BWSR WBIF		ongoing	Westfield Park project completed and featured at an open house for the public August 3, NOHOA entrance raingarden planting completed this month. Several cost share applications moving forward and site visits continue. Two North Oaks homeowner's associations pursuing potential smart irrigation controllers. Continuing to work on projects for the BWSR WBIF grant program with partners, such as a potential raingarden through a Vadnais Heights street reconstruction project.				
GIS		ongoing	Managing ESRI storage, updating the online GIS viewer as needed.				
Monitoring		ongoing	2023 season underway				
WCA		ongoing	Administering WCA as needed.				

Budget Summary	Actual Expense YTD	2023 Budget "working"	Remaining in Budget	% YTD
Operations	\$376,976	\$795,383	\$418,407	47%
CIP	\$169,118	\$826,067	\$656,949	20%
<b>Total</b>	<b>\$546,094</b>	<b>\$1,621,450</b>	<b>\$1,075,356</b>	<b>34%</b>

## TEC Staff Memo – August 9, 2023

### IV. Administration & Operations

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

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

#### B. August TEC Report to the Board

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

### V. Programs

#### A. LL1 2023-05 Swanson Shoreline

Landowners Kristina and Andy Swanson submitted a Landscape Level 1 grant application for a shoreline restoration project on about 256 linear feet of shoreline along the south side of Gilfillan Lake in North Oaks. Gilfillan Lake is impaired for nutrients and the TMDL implementation plan recommends restoring 75% of the shoreline with native vegetation and installing buffers. The shoreline would be restored by removing the existing, failing concrete barricade along the bank, removing invasive species and turf grass, and replacing them with native plant plugs over 140 linear feet. An additional 2,400 square feet of native buffer will be added to further stabilize and restore the shoreline and capture stormwater runoff. The estimated pollutant reductions are about 1.41 tons/year of TSS and 1.2

lbs/year of total phosphorus. The applicant received two bids for the project; one from Natural Shore Technologies at \$15,430 for eligible costs and another from Davey Resources Group at \$10,294 for eligible costs. Staff recommends approval of Landscape Level 1 Grant 2023-05 in the amount of 50% of eligible project expenses, not to exceed \$5,000 in accordance with program guidelines.

#### B. Outreach updates: MN Water Steward capstone, groundwater conservation

Minnesota Water Steward Megan Sigmon-Olsen has completed the purple loosestrife beetle rearing portion of her project. She is now focused on raingarden and Rice Lake shoreline tours at her home, most of which are VLAWMO-funded grant projects including a large curb-cut raingarden. Megan is utilizing VLAWMO and Hamline Center for Global Environmental Education (CGEE) education materials for her neighborhood Night to Unite, which was held on August 1<sup>st</sup>. Neighborhood mailings and additional tours will complete her Water Steward capstone project. Nick will provide photos of the event.

#### C. VLAWMO 40<sup>th</sup> Anniversary Conservation Celebration

The 40<sup>th</sup> Anniversary Celebration is being held August 24<sup>th</sup> from 3-7 pm at the Vadnais-Sucker Lake Park, near the Sucker Lake channel. The event includes food, games, a looking back at the work VLAWMO and the Ramsey County Soil and Water Conservation Division has completed over the years, and tours of nearby restoration efforts. A special retirement commemoration for Stephanie McNamara will occur at **3:30 pm**, with a presentation of a gift from the VLAWMO community and sharing of

cupcakes. Commission and Board members as well as volunteers and the general public are welcome to attend.

**D. Update on Approved 2024 VLAWMO Budget**

At their June 28, 2023 meeting, the VLAWMO Board approved the 2024 annual budget. As approved, the budgeted expenditures for 2024 will be \$1,970,811. To pay these expenditures the projected income within the approved budget for 2024 is made up of: 1) \$1,643,311 from the VLAWMO Storm water Utility and fund balance carry over funds from 2023 and 2) up to \$327,500 in loans, grants and partnership funds. Grants income includes MPCA 319 grant income /partnership for proposed Wilkinson Lk. deep water wetland BMP, and BWSR grant income for watershed-based implementation funding program. These outside funding revenue grant amounts are anticipated to be revised based on project board action and project timing constraints and or other variables.

Summary of some of the key 2024 approved Budget project highlights include (but not limited to):

1. Continued implementation of the Wilkinson Lake deep water wetland BMP,
2. Wilkinson /Tamarack Lake TMDL implementation/ possible alum project,
3. Pleasant Lake management including carp management, possible AIS management (per discussions with MN Dept of Health), and water quality projects,
4. Implementation of proposed resiliency study in East Vadnais Lake subwatershed,
5. Public ditch ongoing ditch maintenance, inspection, and technical work & partnership
6. BWSR Watershed Based Fund grant implementation – cost-share program partnership with member communities including City street reconstruction projects in the City of Vadnais Heights and City of White Bear Lake;
7. Completion of the Spent Lime Demonstration Project at Oak Knoll Pond (construction schedule?),
8. Development of the VLAWMO 10 year watershed management plan,
9. Results of proposed feasibility study of possible water reuse project in Polar Park

**VI. Projects**

**A. Update on Wilkinson deep-water wetland restoration project bid process**

The mandatory pre-bid meeting for interested contractors was well attended and conducted on July 26, 2023. The meeting was held in the North Oaks Community Room, with an initial orientation, project description, and question-and-answer session, that was followed by a site visit to the construction location. The bid package has been purchased and downloaded from Quest CDN ~18 times. Approximately 20 interested contractor representatives attended the meeting. Bid opening is scheduled for August 3, 2023, and a recommendation will be brought to the VLAWMO Board at the August regular meeting.

The current project dashboard is shown below. This dashboard includes all VLAWMO staff time and invoices received through July 31, 2023.

**Dashboard for Wilkinson BMP: Planning doc. for project partners (subject to change)**

November	December	January	February	March	April	May	June	July	August
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Permitting

Early Prelim Design

Preliminary Plans & Specs

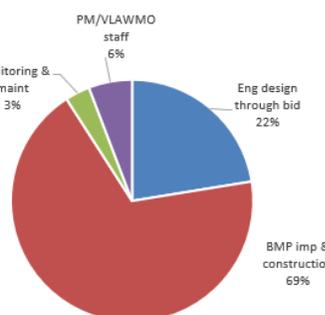
Final Plans & Specs and Bid Proc

Prelim design in packet Feb 13

Final P&S in packet April 17

Authorize bid process in packet June 19

Award of contract in packet August 14

Highlights	Budget vs Spent to date																								
<ul style="list-style-type: none"> <li>&gt; Bid open</li> <li>&gt; Pre-bid meeting July 26</li> <li>&gt; Bid opening Aug. 3, 2:00</li> </ul>	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Costs</th> <th>Anticipated</th> <th>Spent to date</th> <th>+ / (-)</th> </tr> </thead> <tbody> <tr> <td>Eng through bid</td> <td>\$110,302</td> <td>\$127,467</td> <td style="color: red;">(\$17,165)</td> </tr> <tr> <td>BMP imp/const</td> <td>\$374,445</td> <td></td> <td></td> </tr> <tr> <td>Monitoring/maint</td> <td>\$18,096</td> <td></td> <td></td> </tr> <tr> <td>PM/VLAWMO staf</td> <td>\$31,667</td> <td>\$20,369</td> <td>\$11,298</td> </tr> <tr> <td><b>Total Budget</b></td> <td><b>\$534,510</b></td> <td><b>\$147,836</b></td> <td></td> </tr> </tbody> </table>	Costs	Anticipated	Spent to date	+ / (-)	Eng through bid	\$110,302	\$127,467	(\$17,165)	BMP imp/const	\$374,445			Monitoring/maint	\$18,096			PM/VLAWMO staf	\$31,667	\$20,369	\$11,298	<b>Total Budget</b>	<b>\$534,510</b>	<b>\$147,836</b>	
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<p><b>Considerations</b></p> <ul style="list-style-type: none"> <li>&gt; Eagle nesting tree</li> <li>&gt; Monitoring well; will need to be remediated by end</li> </ul>	<div style="text-align: center;">  <p style="font-size: x-small;">Prelim. cost distribution, based on workplan/ revised to include eng. contract updated 5/17/23</p> </div>																								
<p><b>Needed short term</b></p> <ul style="list-style-type: none"> <li>&gt;</li> <li>&gt;</li> <li>&gt;</li> </ul>																									
<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th style="width: 50%;">Tracking</th> <th style="width: 50%;">Comments</th> </tr> </thead> <tbody> <tr> <td>Timing</td> <td><span style="color: green;">●</span> &gt;</td> </tr> <tr> <td>Scope</td> <td><span style="color: green;">●</span> &gt;</td> </tr> <tr> <td>Budget</td> <td><span style="color: yellow;">●</span> &gt;</td> </tr> <tr> <td>Overall</td> <td><span style="color: green;">●</span> &gt;</td> </tr> </tbody> </table>	Tracking	Comments	Timing	<span style="color: green;">●</span> >	Scope	<span style="color: green;">●</span> >	Budget	<span style="color: yellow;">●</span> >	Overall	<span style="color: green;">●</span> >															
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[Communications Plan](#) | 
 [Budget](#) | 
 [Pie Graph](#) | 
 **[Dashboard](#)** | 
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B. Wilkinson deep-water wetland project pre-construction remote-camera survey

A remote camera was set up at the Wilkinson project site on April 22, 2023, with University of Minnesota Community-engaged learning students. The students used photos from the initial camera check for their final poster presentation for their Ethics in Natural Resources course. The camera has been running continuously for more than 11 weeks. The camera has captured photos of mammals including: Raccoons, coyotes, White-tailed deer, and Muskrat. The camera has also captured interesting birds such as waterfowl: Blue-winged teal, Canada geese, Mallards. The resident eagles have even made a few appearances. The eagle pair has 3 chicks this year. Two of them visited the camera site together. The photos below are part of the last camera check that was done when VLAWMO staff were onsite for the mandatory pre-bid meeting. The post-construction camera survey will provide insight into wildlife use following project installation.

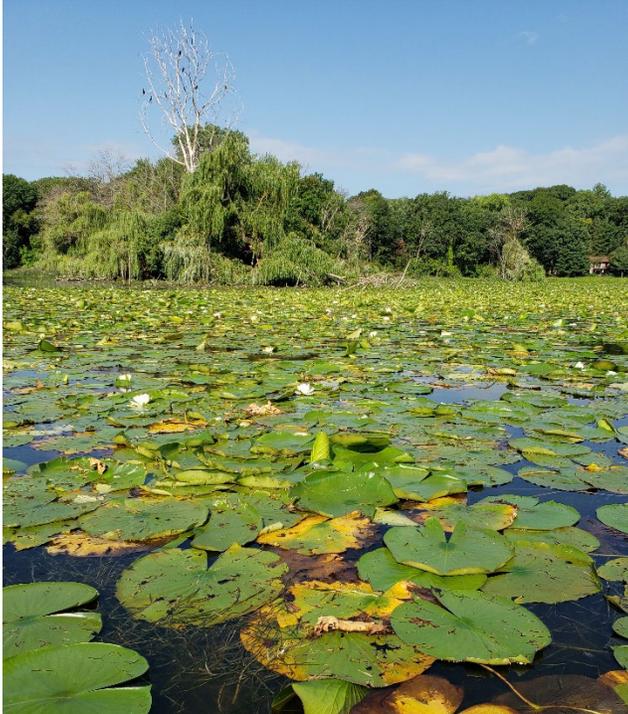


This year's Bald eagle chicks perch together on the log that crosses the channel.



C. Gilfillan aquatic vegetation survey completed

VLAWMO staff joined RCSWCD on July 28, 2020, to complete the Gilfillan Lake aquatic vegetation and bathymetry survey. The last surveys were done on Gilfillan in 2009. The current update expands our understanding about the native plant community in the lake and provides detailed contours of the lake bottom. This information helps to guide ongoing improvement efforts.

<p>Cormorants roosting in the tree in the background during the aquatic vegetation survey that included abundant White waterlilies and some new native plant additions for the lake in our records.</p>	<p>White waterlily blooming on Gilfillan Lake.</p>
	

D. SEH biochar analysis and beginning prep for next 319 grant round

VLAWMO staff met with SEH in June and July to prepare for upcoming 319 grant administration. SEH prepared and is working to complete a task order that includes providing load-reduction results for the biochar filter and Lambert meander. *E. coli* storm samples are being collected by VLAWMO staff and analyzed in the lab by our partners at SPRWS. P and TSS reductions collected by VLAWMO staff during 2022 are being analyzed for the meander. Results of SEH’s analysis will be provided to the MPCA as part of the grant close-out for that project.

In anticipation for the next grant round in the 319/small, priority watershed program with MPCA, VLAWMO staff met with SEH engineers to work on a task order to investigate possible projects to continue to work toward improvement of Wilkinson Lake. Results of this work and other potential project

investigations that are underway will be provided to the TEC for consideration as early feasibilities are evaluated and optimal projects are identified. VLAWMO will provide a project proposal to the MPCA in 2025. Preparation at this time will prepare us for the next grant-funded project.

# LL1 Grant Application



Submit completed application to:

Lauren Sampedro

lauren.sampedro@vlawmo.org

## Applicant Information:

Name:	Kristina & Andy Swanson
Address:	35 Robb Farm Road
City/Township, State, Zip:	North Oaks, MN 55127
Phone:	612.239.6751
Email:	kdolejsi@hotmail.com

## Project Summary:

ESTIMATED TOTAL PROJECT COST (\$)	\$10,294
AMOUNT REQUESTED (\$5,000 reg, \$7,500 curb cut)	\$5,000
EXPECTED PROJECT COMPLETION (Month, Year)	Fall 2023

### PROJECT TYPE:

- Raingarden/Infiltration Basin: Curb cut
- Raingarden/Infiltration Basin: Regular
- Shoreline/Streambank Stabilization and/or Restoration
- Filtration
- Other

If other, please describe the proposed project: \_\_\_\_\_

## Project Background:

Describe the project location. Does it connect to a lake, stream, ditch, or wetland in VLAWMO?  What issues will be addressed with this project?	256 Feet of shoreline restoration includes concrete barriers.  Connects to Lake Gilfilan.  Concrete baracades, erosion control and a large array of invasive plants.
---	--

## Project Background: Continued

<p>Describe how your project will support the goals of the Landscape Level 1 Grant Program. (See LL1 policy)</p>	<p>Stabilize and restore actively eroding shoreline/land area.</p> <p>Improve shoreline health and water supply on lake Gilfilan.</p> <p>Reduce stormwater volume.</p> <p>Plant native plants to create a better environment for pollinators and beneficial species.</p>
<p>Briefly describe the planned installation and maintenance activities for your project.</p>	<p>Remove concrete barriers, eradicate invasive plants, restore shoreline.</p> <p>We will maintain by weeding and watering plants, etc. Please see additional details in the proposals attached for additional details.</p>

## Project Specifications:

<p>TOTAL PROPERTY AREA (Acres)</p>	<p>.66ac</p>	<p>Total PROJECT SIZE (Sq Ft)</p>	<p>~2,600sq ft Upland buffer+SL</p>
<p>IMPERVIOUS (HARD) AREA DRAINING TO PROJECT (Sq Ft):</p>	<p>4,874 sq ft</p>	<p>PERVIOUS (GRASSY, NON-PAVEMENT) AREA DRAINING TO PROJECT (Sq Ft):</p>	<p>14,660</p>
<p>DEPTH OF PRACTICE (In): <i>Provide if project includes infiltration/filtration</i></p>	<p>N/A</p>	<p>BOTTOM SURFACE AREA (Sq Ft): <i>Provide if project includes infiltration/filtration</i></p>	<p>N/A</p>

## Required Attachments:

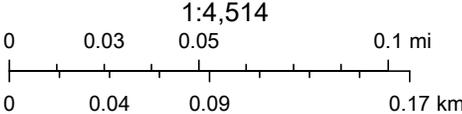
- ⇒ Detailed drawing or plan of the proposed project. If project is complex, VLAWMO may require project final designs to be completed by a qualified professional or engineer. Drawing must include project dimensions that enable VLAWMO staff to model the project for estimated water quality benefits.
-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

# LL1 2023-05 Swanson Shoreline



7/31/2023, 4:31:51 PM

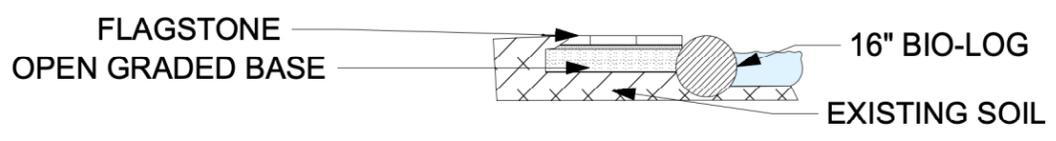
-  VLAWMO Boundary 2020
-  Project Location
-  VLAWMO Lakes



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, County of Ramsey, Esri, HERE, Garmin, GeoTechnologies, Inc., ArcGIS Web AppBuilder, County of Ramsey, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA

-  Sedges/Rushes/Grasses - 110
-  Ansie Hyssop - 32
-  Blue Flag Iris - 34
-  Joe Pye-Weed - 18
-  Little Blue Stem - 24
-  Cardinal Flower - 32

 Upland Buffer Seed Mix BWSR



LAKESHORE PATIO CONSIDERATIONS AND OPTIONS:  
 1. COMPACTED SUB BASE DEPTH MAY VARY DEPENDING UPON SOIL TYPES AND CONDITIONS  
 2. FLAGSTONE ESTIMATES VARY DEPENDING UPON STONE SELECTED AND MAY INCREASE WASTE MATERIAL DEPENDING UPON PATIO SHAPE. DISCUSS THIS WITH YOUR INSTALLER.

**SHOOTING STAR**  
 NATIVE SEEDS  
 20740 County Road 33 • Spring Grove, MN 55574  
 (651) 488-3444 • info@shootingstarnative.com

Description: Mixture W2 (BWSR Native Sedge/Wet Meadow)  
 Seeding Rate: 5 lb/acre (127.9 seeds/square foot)  
 Notes: This mix is designed for mitigation projects.

Common Name	Scientific Name	% of Mix	Seeds/ft <sup>2</sup>	Total
<b>Grasses</b>				
Fringed Brome	Bromus ciliatus	8.10%	1.5	0.405 PLS lb
Bluejoint Grass	Calamagrostis canadensis	1.60%	8.2	0.080 PLS lb
Virginia Wild Ryegrass	Elymus virginicus	42.30%	3.3	2.115 PLS lb
American Mann Grass	Glyceria grandis	3.20%	4.1	0.160 PLS lb
Fox Mann Grass	Glyceria striata	1.60%	4.7	0.080 PLS lb
Fox Bluegrass	Poa palustris	7.10%	17.0	0.355 PLS lb
<b>Sedges &amp; Rushes</b>				
Butterfly Sedge	Carex comosa	4.30%	2.4	0.215 PLS lb
Parish-broom Sedge	Carex scoparia	1.00%	1.5	0.050 PLS lb
Tussock Sedge	Carex viciata	0.80%	0.8	0.040 PLS lb
Common Fox Sedge	Carex stipata	3.20%	2.0	0.160 PLS lb
Brown Fox Sedge	Carex vaginulata	3.20%	5.9	0.160 PLS lb
Path Rush	Juncus tenuis	0.20%	3.7	0.010 PLS lb
Torre's Rush	Juncus torreyi	0.60%	17.6	0.030 PLS lb
Dark Green Bulrush	Scirpus atrovirens	2.00%	16.9	0.100 PLS lb
Woodgrass	Scirpus cyperinus	0.20%	6.2	0.010 PLS lb
<b>Forbs</b>				
Sheep Milkwed	Achillea incanata	5.00%	0.4	0.250 PLS lb
Flat-topped Aster	Diochrysis umbellata	1.20%	1.5	0.060 PLS lb
Flaxweed	Ficaria pectinellata	0.40%	1.7	0.008 PLS lb
Grass-leaved Goldenrod	Euthamia graminifolia	0.20%	1.3	0.010 PLS lb
Joe Pye Weed	Euthocium maculatum	0.40%	0.7	0.020 PLS lb
One-eyed	I. helianthi autumnale	0.30%	0.7	0.015 PLS lb
Sawtooth Sunflower	Helianthus grosseserratus	0.60%	0.2	0.030 PLS lb
Small Blue Lobelia	Lobelia spicata	0.30%	2.8	0.015 PLS lb
Monkey Flower	Monarda virginica	0.20%	8.4	0.010 PLS lb
Virginia Mountain Mint	Pycnanthemum virginianum	0.30%	1.2	0.015 PLS lb
Clart Goldenrod	Solidago arguta	0.20%	1.4	0.015 PLS lb
Swamp Aster	Symphoricarpos panicum	4.00%	5.9	0.200 PLS lb
Purple Meadow Rue	Thalictrum dasycarpum	0.40%	0.1	0.020 PLS lb
Blue Vervain	Verbena hastata	1.30%	2.2	0.065 PLS lb
Common Ironweed	Veronica fasciculata	0.50%	0.2	0.025 PLS lb
Culver's Root	Veronicastrum virginicum	0.20%	2.9	0.010 PLS lb
Colden Alexanders	Zizia aurea	5.00%	1.0	0.250 PLS lb

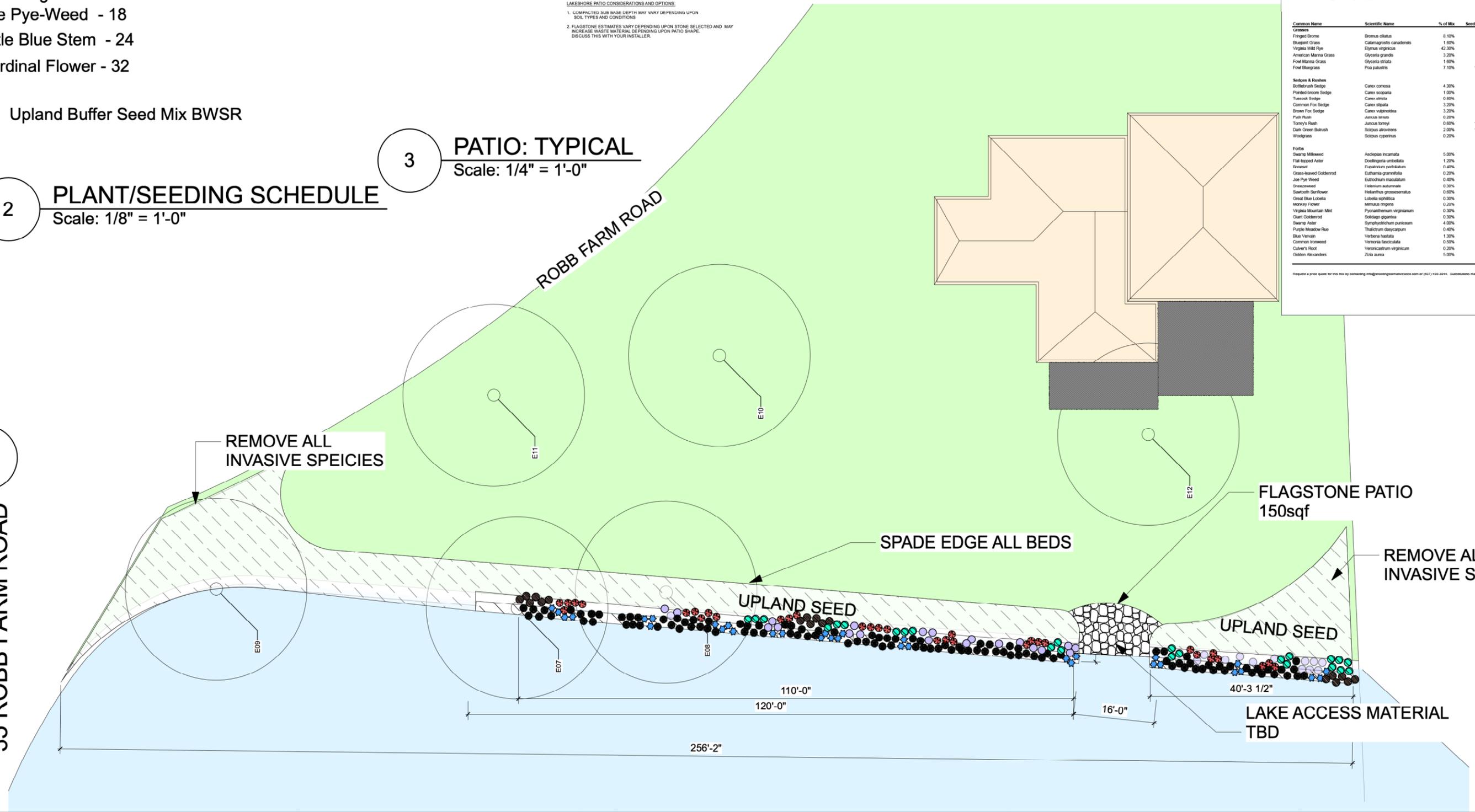
Request a price quote for this mix by contacting info@shootingstarnative.com or (651) 488-3444. Substitutions may be necessary based on availability at the time of order.

Page 1 of 1

**2 PLANT/SEEDING SCHEDULE**  
 Scale: 1/8" = 1'-0"

**3 PATIO: TYPICAL**  
 Scale: 1/4" = 1'-0"

**1**  
 Scale: 1" = 20'-0"  
 35 ROBB FARM ROAD



**SWANSON RESIDENCE**  
 35 ROBB FARM ROAD  
 NORTH OAKS, MN

DATE	REVISIONS

**DAVEY**   
**Resource Group**  
 1196 7th St E, St. Paul, MN 55106 • 651-202-3662

DRAWN BY	CH
CHECKED	Checked
APPROVED	Approved
SCALE	1" = 20'-0" 

Date: 6/1/2023  
**L100**  
 Pg. 024



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## Restoration Proposal for:

Ms. Kristina Dolejsi  
35 Robb Farm Road  
North Oaks, MN

**Proposal Date: August 1, 2023**

**Prepared by:**

Bill Bartodziej M.S., Senior Restoration Ecologist  
Natural Shore Technologies, Inc.  
612.730.1542 [bill.b@naturalshore.com](mailto:bill.b@naturalshore.com)



## ***Project Summary***

1. Project site: shoreland – 200' L x 10' W on average (2,000 SF)
2. Site assessment and plan development include: detailed site preparation methods, plant selection, and a project timeline and work schedule for our staff. Because most of projects involve the establishment of natural buffers, site drawings and planting plans are not necessary. We have found that over time, native plants will seek out the optimal micro-habitats and flourish. However, project plan drawings can certainly be provide at an additional cost upon client request.
3. Delineate and verify total restoration project area.
4. Kill selected turf areas with an herbicide appropriate for upland or aquatic use. A licensed herbicide applicator from Natural Shore Technologies will apply the treatment.
5. Cut and remove any weedy plant material from planting area.
6. Install biologs at the base of the shore slope. (seawall will be removed by another contractor or by the landowner)
7. Apply a 2-3" layer of shredded hardwood mulch in areas that will be planted.
8. Plant selections will provide flowering throughout the growing season, with at least 25 native plant species included in the plan.
9. Lay out plants into plant zones per plan specifications and install at approximately 1.5' centers.
10. Mulch will be moved aside, plant containers installed, and a light mulch layer will be returned around the base of the plants to hold moisture.
11. We will use 1,000 – 3-4" containers for your planting.
12. Site monitoring will be conducted and appropriate maintenance will be provided through October, 2024.

**Installation note:** Prior to installation, please let us know of any underground utility lines, sprinkler lines, or other obstacles in the restoration area. It is the owner responsibility to clearly mark lines, and NST will not be held liable for any damages.

# Preliminary Plant Species List

Common Name	Scientific Name	Height (ft)	Color	Bloom Time
<b>EMERGENT</b>				
Spike rush	<i>Eleocharis palustris</i>	1 to 2	Brown	June-July
Broadleaved arrowhead	<i>Sagittaria latifolia</i>	4	White	July - August
Hard Stem Bulrush	<i>Schoenoplectus acutus</i>	4 to 6	Brown	July - August
Soft Stem Bulrush	<i>Schoenoplectus tabernaemontani</i>	4 to 6	Brown	July - August
Giant burreed	<i>Sparganium eurycarpum</i>	3 to 5	Green/Brown	July - August
<b>WET MEADOW</b>				
<b>Grasses, Sedges, Rushes</b>				
Canada Blue Joint	<i>Calamagrostis canadensis</i>	3 to 6	Tan-Green	July - August
Bebb's Sedge	<i>Carex bebbii</i>	2 to 3	Green	May - June
Bottlebrush Sedge	<i>Carex comosa</i>	2 to 3.5	Green	May - June
Porcupine Sedge	<i>Carex hystricina</i>	2 to 3.5	Green	May - June
Tussock Sedge	<i>Carex stricta</i>	2 to 3	Green	May - July
Fox Sedge	<i>Carex vulpinoidea</i>	1.5 to 2.5	Green	May - June
Green Bulrush	<i>Scirpus atrovirens</i>	2 to 5	Green-Brown	July - August
Woolgrass	<i>Scirpus cyperinus</i>	3 to 5	Brown	July-September
<b>Forbs</b>				
Sweet flag	<i>Acorus calamus</i>	2	Green	May - July
Canada Anemone	<i>Anemone canadensis</i>	1 to 2	White	May - July
Swamp Milkweed	<i>Asclepias incarnata</i>	3 to 4	Lavender	June - August
Turtlehead	<i>Chelone glabra</i>	2 to 3	White	August - October
Boneset	<i>Eupatorium perfoliatum</i>	2 to 4	White	June-July
Joe-Pye Weed	<i>Eutriochium maculatum</i>	3 to 6	Purple	June-July
Sneezeweed	<i>Helenium autumnale</i>	4 to 5	Yellow	August - September
Blue Flag Iris	<i>Iris versicolor</i>	2 to 3	Blue	June - July

Meadow Blazing Star	<i>Liatris ligulistylis</i>	2 to 3.5	Purple	June - July
Cardinal Flower	<i>Lobelia cardinalis</i>	3 to 4	Red	June - October
Blue Lobelia	<i>Lobelia siphilitica</i>	1.5 to 2.5	Blue	June - October
Mountain Mint	<i>Pycnanthemum virginianum</i>	2 to 3	White	July - September
New England Aster	<i>Symphyotrichum novae- angliae</i>	3 to 5	Purple	September- October
Blue vervain	<i>Verbena hastata</i>	2 to 5	Purple	July-August
Culvers Root	<i>Veronicastrum virginicum</i>	3 to 5	White	July-August

## PRAIRIE

### Grasses, Sedges

Side Oats Grama	<i>Bouteloua curtipendula</i>	1.5 to 2.5	Red-green	July - September
Blue Grama	<i>Bouteloua gracilis</i>	.5 to 1	Green-purple	July-September
June grass	<i>Koeleria macrantha</i>	1 to 2	Amber	May-June
Little Bluestem	<i>Schizachyrium scoparium</i>	1.5 to 3	Amber	July - September
Indian Grass	<i>Sorghastrum nutans</i>	4 to 6	Amber	July - September
Prairie Dropseed	<i>Sporobolus heterolepis</i>	1.5 to 3	Green	August - October

### Forbs

Anise Hyssop	<i>Agastache foeniculum</i>	2 to 4	Purple	June-October
Prairie Onion	<i>Allium stellatum</i>	1 to 1.5	Pink	July - September
Butterfly Milkweed	<i>Asclepias tuberosa</i>	1 to 2	Orange	June - September
Blue wild indigo	<i>Baptisia australis</i>	4.0	Blue	May-July
Prairie Coreopsis	<i>Coreopsis palmata</i>	1.5 to 2.5	Yellow	June - September
Purple coneflower	<i>Echinacea purpurea</i>	4.0	Purple	July-September
Rattlesnake master	<i>Eryngium yuccifolium</i>	4.0	White	July-September
Oxeye	<i>Heliopsis helianthoides</i>	5.0	Yellow	June-September
Prairie blazing star	<i>Liatris pycnostachya</i>	2 to 5	Purple	August - September
Wild bergamot	<i>Monarda fistulosa</i>	4.0	Pink-Purple	July-September
Foxglove Beardtongue	<i>Penstemon digitalis</i>	3 to 4	White	July-August

Prairie Phlox	<i>Phlox pilosa</i>	1.5 to 2	Pink	May - June
Mountain Mint	<i>Pycnanthemum virginianum</i>	2 to 3	White	July - September
Grey-headed Coneflower	<i>Ratibida pinnata</i>	5.0	Yellow	July-September
Black Eyed Susan	<i>Rudbeckia hirta</i>	2 to 3	Yellow	June - October
Heath aster	<i>Symphyotrichum ericoides</i>	2 to 4	White	August-September
Smooth blue aster	<i>Symphyotrichum laeve</i>	4	Blue	August-October
Aromatic aster	<i>Symphyotrichum oblongifolium</i>	2	Purple	August-November
Sky Blue Aster	<i>Symphyotrichum oolentangiense</i>	2 to 3.5	Purple	August-October
Ohio Spiderwort	<i>Tradescantia ohiensis</i>	2 to 4	Blue	July - October
Hoary vervain	<i>Verbena stricta</i>	1 to 3	Purple	July-August
Golden Alexanders	<i>Zizia aurea</i>	1 to 3	Yellow	May-July

## Project Cost

This bid includes project design and management, all materials, labor, and a two year maintenance plan. This is a comprehensive bid estimate and valid for thirty days. We require a 50% down payment to schedule your project.

## Cost Breakdown

Site Design, Project Management, Mobilization	\$1,400.00
Site preparation, herb. trts, clearing, hauling, fine grading	\$2,210.00
Mulch and/or Erosion Control - installed, Temp. fencing	\$1,770.00
Biologs - 16" dia., soil smoothing behind - install - 100'	\$5,250.00
1,000 Plants - 3" and 4" - containers @ 1.5' spacing	\$4,800.00
Maintenance Plan - 3 visits - 2022	<del>\$540.00</del>
Maintenance Plan - 5 visits - 2023	<del>\$900.00</del>
<b>TOTAL =</b>	<del><b>\$16,870.00</b></del>

*\$15,430 eligible costs  
LA*

(seawall removal conducted by another contractor or landowner)

## Site maintenance

Site maintenance includes at least 5 visits per year during the growing season to monitor and conduct activities that will ensure proper restoration establishment. We use the most appropriate, up-to-date maintenance techniques such as targeted herbicide application, hand pulling, mowing, and spot weed whipping to effectively control invasive weeds. Our lead maintenance supervisor has a B.S. in Biology and 10 years of field experience.

**Watering** – We will thoroughly water your site immediately after plant installation. Any necessary watering after installation is the responsibility of the owner. (Generally, normal rainfall during the growing season is adequate for native plant establishment.)

**\*Note we do offer long-term maintenance contracts. Over 90% of our clients use that service.**

## Staff Qualifications

Our company has over 50 years of combined ecological restoration experience. We are a local company that focuses on quality ecological restoration in the Metro area. Our clients vary from private estates on Lake Minnetonka, to large corporate headquarters in Eden Prairie. We also work with many city and county governments and watershed management organizations. We are fully insured.

Our specialty is lakeshore and wetland restoration. We have restored many miles of lakeshore in Minnesota, more than any other company. Please see our portfolio for examples of our restoration projects that include; shorelines, wetlands, prairies, savannas, and rain gardens.

Please see our **project photo book** at: <http://www.blurb.com/books/6034090-natural-shore-technologies-inc-photobook>

## Natural Shore Technologies Plant Material

We have commercial and retail greenhouses in Maple Plain. Our plants are Minnesota native perennials that will flourish year after year. Utilizing our own plant material in our projects assure quality control. Our wetland and prairie plants are guaranteed to establish during the first growing season. Perennial plants put most of their energy into establishing root systems so please keep in mind that the first year of growth will be mainly underground. You will see some flowering the first year, but significantly more flowering during the second year of establishment.

Information about our **retail native plant greenhouses** located in Maple Plain is also available at: [www.naturalshore.com](http://www.naturalshore.com)



# Guarantee

We stand by our native plant material and our ecological restoration services.

Native plants that we install are guaranteed to establish during the first growing season. Any plant material that does not make it through the first growing season will be replaced at no charge to the client.

On projects that we install and manage, we will guarantee successful establishment of your ecological restoration within three full growing seasons. This proposal provides a plan for accomplishing the restoration of the project site. If successful establishment does not occur within three growing seasons, all necessary steps will be taken to ensure the eventual success of the project, at no additional charge. For purposes of this guarantee, successful establishment is defined as follows: That the presence of at least 80% of the original seeded or planted species can be found on the site, and that the overall density of vegetation is comprised of no less than 80% native species.

The only exceptions to this guarantee have to do with plant death due to acts of God (floods or drought) the actions of others (vandalism), or animal herbivory (e.g., geese, muskrats). Watering by the owner during dry periods is necessary, and the lack of adequate watering in this circumstance may nullify this guarantee.

If these extreme circumstances do happen to occur, we will work with the client at a reduced rate to make all necessary repairs.

Our goal will always be to create successful, long-term partnerships with our clients. Our guarantee is the best in the business, and provides you with a clear understanding that we are here to fully support your ecological restoration endeavor.

# Contract

- A down payment of \$8,400 is required to schedule your project.
- The remainder of the project cost is due at project completion. Any unpaid amount beyond the 30 day period after billing will incur a 3% monthly finance charge.
- *Please note that this proposal is valid for 30 days from the date on this Contract.*

If you would like to proceed with the above outlined project, please sign the contract below.

**Client name:** Ms. Kristina Dolejsi

**Contract Value:** \$16,870.00

**Signed:** \_\_\_\_\_ **Date** \_\_\_\_\_

**Contractor:** *Natural Shore Technologies, Inc.*

**Signed:**

**Contract Date:** Contract Date for 30 Day term



William M. Bartodziej, M.S.

Senior Restoration Ecologist, Natural Shore Technologies

**Please return a signed copy of this contract and a check to:**

Natural Shore Technologies, Inc.  
6275 Pagenkopf Rd.  
Maple Plain, MN 55359





**Corporate Headquarters**  
295 South Water Street, Suite 300  
Kent, OH 44240  
800-828-8312

**Local Office**  
1196 7th St E  
St. Paul, MN 55196  
651-202-3662

June 1, 2023

**Kristina Dolejsi**

35 Robb Farm Road  
North Oaks, MN 55330

***RE: Shoreline Restoration***

**Dear Kristina**

Thank you for contacting Davey Resource Group, Inc. “DRG” to provide you with this proposal to work with you on your shoreline restoration planting . This proposal is inclusive of all labor, material, and equipment required to perform work described in the RFP.

This proposal can be implemented by either issuing a purchase order, or by signing the Authorization to Proceed below and returning to our office.

If you have any questions or wish to arrange for a meeting to discuss this scope of work and more specifically the treatment methods and areas, please call our office at **651.202.3662** or my cell at **651-253-2157**.

Sincerely,

Chuck Hanna  
Principal Consultant  
Davey Resource Group, Inc.  
[www.daveyresourcegroup.com](http://www.daveyresourcegroup.com)

# Authorization to Proceed

## SHORELINE RESTORATION

1. Buckthorn removal and treatment along shoreline as shown on plan.	<del>\$2,000.00</del>
2. Removal and disposal of concrete barriers along shoreline:	<del>\$3,800.00</del>
3. Installation of 19 - 16" Coconut Fiber Biologs, staked and tied	\$5,035.00
4. 230 sqy of sod removal and disposal (Spade Edge )	\$1,725.00
5. Grading with existing soils to back of bio logs	\$480.00
6. Installation of 249 native plugs as per plan	\$871.50
7. Installation of 5 - #5 native shrubs	\$300.00
8. Installation of Upland Seed Mix 2,400 sqf	\$390.00
9. Installation of 255 SQY Category 3 Straw Blanket	\$892.50
10. <u>Site Restoration</u>	<u>\$600.00</u>

Total Project Cost

~~\$16,094.00~~

\$10,294

eligible  
costs  
LX

## SHORELINE PATIO

- |   |                       |
|---|-----------------------|
| 1. Install 150 sqf Chilton Patio over 6" of open graded rock. | <del>\$,9750.00</del> |
|---|-----------------------|

Any additional services requested, outside of the scheduled maintenance as described above shall be invoiced at \$95.00 per hour plus material. Prices above do not include appropriate sales tax, which will be added at the time of invoice. DRG may make recommendations to the client as issues occur. Any additional request for services shall be done in writing or electronically to benjamin.rietz@davey.com.

**By signing this form, I do hereby acknowledge acceptance of the scope of work and associated fee, as well as the terms and conditions and limited warranty contained herein. Furthermore, my signature authorizes the work to be performed.**

Client Name:

Authorizing Signature: \_\_\_\_\_

Title:

Date:

**Davey Resource Group, Inc.**

Name/Title:

Date:

## TERMS AND CONDITIONS

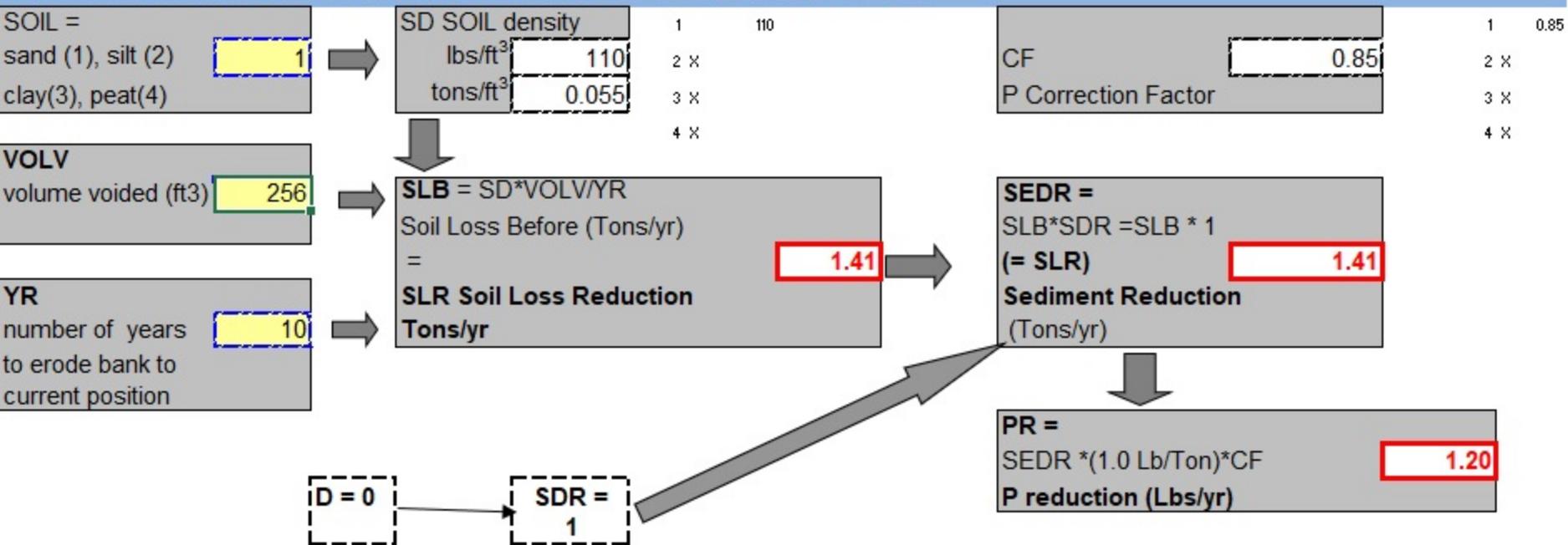
- All pricing is valid for 30 days from the date of this proposal, after which time we reserve the right to amend fees as needed.
- Time and materials (T&M) estimates may fluctuate and will be billed accordingly. Fixed fee contract prices will be billed as shown.
- Invoicing will be submitted monthly for work performed, unless otherwise agreed upon.
- Payment terms are net 30 days.
- If prevailing wage requirements are discovered after the date of this proposal, we reserve the right to negotiate our fees.
- Plant materials are subject to availability and substitutions may be made as necessary.
- All trees and shrubs are warranted for one year from the date of the project completion.
- Warranty does not cover lack of proper care, animal, vehicle, storm, drought, vandalism or human-caused damage.
- The client is responsible for any permit fees, taxes, and other related expenses, unless noted as being included in our proposal.
- The client shall provide 48 hours' notice of any meetings where the consultant's attendance is required.
- Unless otherwise stated, one round of revisions to deliverables is included in our base fee. Additional edits or revisions will be billed on a time and material (T&M) basis.
- All reports are provided only to the client unless otherwise directed.

## LIMITED WARRANTY

Davey Resource Group, Inc. (“DRG”) provides this limited warranty (“Limited Warranty”) in connection with the provision of services by DRG (collectively the “Services”) under the agreement between the parties, including any bids, orders, contracts, or understandings between the parties (collectively the “Agreement”).

Notwithstanding anything to the contrary in the Agreement, this Limited Warranty will apply to all Services rendered by DRG and supersedes all other warranties in the Agreement and all other terms and conditions in the Agreement that conflict with the provisions of this Limited Warranty.

# Stream & Ditch Bank Stabilization Estimator Version 2.1



**Legend:**

- [Yellow box] = input
- [White box with dashed border] = calculated value
- [Red box] = result

ENTER THIS DATA ON eLINK INDICATORS TAB	
SEDIMENT (TSS) T/yr:	1.41
SOIL (estimated savings) T/yr:	1.41
PHOSPHORUS (est. reduction) lbs/yr:	1.20

# V.A. Swanson Shoreline

## LL1 2023-05 Grant Application

**Lauren Sampedro**  
**TEC Meeting**  
**8/9/2023**



## Landscape Level 1-Shoreline



