

VLAWMO TECHNICAL COMMISSION MEETING
8:00 AM July 13th, 2022

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

Action items: ✈

- I. **Call to Order – 8:00am –Chair Jesse Farrell**
- II. **Approval of Agenda**
- III. **Approval of Minutes (June 8, 2022) Pg. 2**
- IV. **Administration & Operations**
 - A. Financial Report for Payment – Phil ✈ Pg. 8
- V. **Programs**
 - A. Education & Outreach – Nick
 - 1. Bridgewood Raingarden update and kickoff event Pg. 15
 - 2. Turf and salt maintenance tools Pg. 21
- VI. **Projects**
 - A. Update on RWMWD’s request for Boundary change in West Vadnais Lake Drainage Area - Phil Pg. 24
 - B. Update on Biochar project - Brian Pg. 27
- VII. **Commissioner Reports**
- VIII. **NOHOA**
- IX. **Ramsey Soil & Water Conservation Division**
- X. **St. Paul Regional Water Services**
- XI. **Public Comment**
- XII. **Next Meetings:** TEC: August 10th, Regular Board Meeting: August 24th, 2022
- XIII. **Adjourn**

Upcoming events:

- July 21: Lakeaires Elementary Raingarden Brush-up
- Aug 11: Native Plant Walk-and-Talk
- Sept 21: Smart Salting Training

**Vadnais Lake Area Water Management Organization
Technical Commission (TEC) Minutes
June 8th, 2022
Vadnais Heights City Hall, Council Chambers
800 County Road E East, Vadnais Heights, MN 55127**

Commission Members Present:

Jesse Farrell	Chair, Vadnais Heights (VH)
Bob Larson	Treasurer, North Oaks (NO)
Terry Huntrods	White Bear Lake (WBL)
Paul Duxbury	White Bear Township (WBT)
Andy Nelson	Lino Lakes (LL)

Absent: Gloria Tessier - Vice Chair, Gem Lake (GL)

Others in attendance: Phil Belfiori, Brian Corcoran, Dawn Tanner, Lauren Sampedro, Nick Voss (VLAWMO staff); Patricia Orud (North Oaks Home Owner's Association), Ann WhiteEagle (Ramsey County Soil and Water Conservation District) Justine Roe (Saint Paul Regional Water Services).

I. Call to Order

Chair Jesse Farrell called the meeting to order at 8:02 am.

II. Approval of Agenda

Administrator Belfiori proposed agenda item Wilkinson project V. B. to no longer be an action item.

It was moved by Commissioner Huntrods and seconded by Commissioner Larson to approve the June 8, 2022, TEC agenda as amended. Vote: all aye. Motion passed.

III. Approval of Minutes (May 11, 2022)

It was moved by Commissioner Duxbury and seconded by Commissioner Larson to approve the May 11, 2022, meeting minutes as presented. Vote: all aye. Motion passed.

IV. Administration & Operations

A. Financial Report for Payment

Belfiori outlined the June finance table including stormwater utility budgeting, the current monitoring season, education and outreach activities, biochar project, and the Sucker/Vadnais subwatershed. Belfiori recommended approval of the bills for June.

It was motioned by Commissioner Larson and seconded by Commissioner Huntrods to recommend approval of the June 2022 financial report for payment. Vote: all aye. Motion passed.

B. TEC Report to Board

Belfiori highlighted upcoming activities including quotes for solicitation for the White Bear Township biochar project and a stormwater utility increase for the 2023 budget. He stated VLAWMO is also engaging in discussions with the City of White Bear Lake regarding Adaptive Lake Management (ALM) for East Goose Lake, creating a public drainage policy, and coordinating the Wilkinson BMP 319 project. Staff recommends approval of the TEC report to the Board of Directors.

It was motioned by Commissioner Duxbury and seconded by Commissioner Larson to recommend approval of the June 2022 TEC report to the Board. Vote: all aye. Motion passed.

V. Programs

A. Public drainage policy recommendation

Corcoran introduced the proposed public policy for public drainage systems Ditch 13 and 14. The policy is to provide guidance for future Board decisions on public drainage management activities and procedures. Items include public drainage inspection, minor routine maintenance implementation, major repair implementation if/where needed, and a process outlining the creation of partner requests for drainage system projects.

The draft policy was brought to the VLAWMO Board on April 27, 2022. The next step is to bring a final draft to the Board for the June 22, 2022 meeting, which would be implemented in conjunction with a Watershed Management Plan amendment in fall of 2022.

Chair Farrell mentioned that it is a useful effort to clarify roles. He noted that current efforts have been showing progress; in the spring of 2022, after a series of heavy rains, there were no calls about high water levels to the City of Vadnais Heights.

It was motioned by Commissioner Huntrods and seconded by Commissioner Larson to recommend approval of the public drainage policy recommendation. Vote: all aye. Motion passed.

B. Introduction to FY '22-23 BWSR WBIF grant proces

Sampedro introduced the BWSR Watershed-based Implementation Funding (WBIF) program for fiscal year 2022-23. Sampedro provided an introduction and background on

the WBIF program and its purpose. BWSR has allocated \$6.5 million to the metro area for the current funding cycle. LGUs such as VLAWMO and its member communities are eligible to pursue projects based on their specific watershed's local priorities. The VLAWMO watershed area was allocated \$75,000 for partners to spend on clean water activities. If funding is secured, projects will require a 10% match.

The process to complete a funding request to BWSR requires a prepared decision-making committee including one representative from VLAWMO, two representatives from local municipalities, one representative from the counties with approved groundwater management plans, and one representative from each Soil and Water Conservation Districts; holding at least one convene meeting with partners; and choosing a convene meeting facilitator/coordinator. Representatives have voting ability, and representatives must be chosen prior to holding convene meetings.

Staff invited the TEC to choose two municipal decision-making representatives. Chair Farrell and Commissioner Nelson volunteered to be convene meeting representatives.

Staff suggested the TEC considers VLAWMO to serve as convene meeting coordinator and asked for TEC input. The VLAWMO TEC recommended VLAWMO staff to serve as the convening meeting coordinator.

Sampedro discussed the proposed WBIF program timeline including holding the first convene meeting in July or August and submitting proposed grant activities to BWSR between July and November 2022.

C. Soil Health Grant: SHG 2022-08

Voss provided an overview of the grant application. He noted that structural components of the bee lawn project will be self-funded by the landowner. He summarized the project plan sheet, which was included in the packet. Commissioner Nelson recommended that natural netting erosion control blanket be added to the plans for the project. He discussed the negative impacts of erosion control blankets that use plastic and recommended VLAWMO considers changing its cost share policy to always include erosion control blankets made with natural material. The TEC agreed to add the condition. Chairr Farrell asked if staff had an example of what bee lawns look like when they mature. Voss provided an example photo of what a completed bee lawn may look like and explained the common species used in bee lawns. The TEC members discussed the results of No Mow May and ways the program could be improved in the future through more deliberate strategies, such as targeting key areas to convert conventional turf grass into bee lawn and providing signage so the effort is clearer to residents.

It was motioned by Commissioner Huntrods and seconded by Commissioner Larson to approve SHG 2022-08 with the addition of natural erosion control blanket. Vote: all aye. Motion passed.

D. Website renovation

Voss provided a short summary on the website evaluation process. He invited the TEC to participate in the survey linked in the TEC packet. Commissioner Duxbury asked for clarification on the recommended TEC action. Voss recommended the TEC provide a recommendation that the TEC's feedback on the survey be provided to the Board to help inform the website evaluation process, and staff will work with HDR on the scope of work and budget for the website renovation process.

It was motioned by Commissioner Duxbury and seconded by Commissioner Huntrods to recommend the TEC's website survey results be provided to the VLAWMO Board of Directors for the June 22, 2022, Board meeting. Vote: all aye. Motion passed.

E. Update on Education and Outreach program

Voss updated the TEC on several education and outreach events including the Bridgewood raingarden kickoff meeting on July 12, 2022. He also noted planned communications related to the North Oaks entrance raingarden, the St Mary's raingarden, and MS4 tools and resources development with partnering communities. Voss also provided an update on the AFSA service day on May 27th.

V. Projects

A. Maintenance JPA Sucker Vadnais Park

Tanner described the upcoming activities on the Vadnais/Sucker park restoration and agreements outlined for ongoing maintenance.

It was motioned by Commissioner Huntrods and seconded by Commissioner Nelson to approve adding VLAWMO's signature to the Vadnais/Sucker Park restoration JPA. Vote: all aye. Motion passed.

B. Wilkinson BMP project update

Tanner described that three bids have been received for the Wilkinson BMP project, a consensus recommendation was provided to the sub-committee, and the sub-committee is providing a recommendation to the Board for the June 22, 2022 meeting.

C. Carp update

Tanner described the spring carp removal efforts as a success and ongoing effort, with ~15,000 lbs harvested so far. The average fish is about 23 lbs, which is above (four times) the average carp size in the metro. The project has a goal of reaching a threshold of 100 kg/hectare. A follow-up biomass survey and updated PIT tagging effort is planned for this summer to allow staff and consultants to understand what has been accomplished so far and inform the ongoing removal process. That scope of work will be brought to the Board at the June 22 meeting as a consent item.

D. Notification of acceptance of EWM treatment grant for Birch Lake

Tanner shared that VLAWMO was notified by the MN DNR in May that the grant proposal for Eurasian watermilfoil treatment in Birch Lake was selected for funding by the MN DNR. The grant provides support for treatment of Eurasian watermilfoil for two years, led by the Birch Lake Improvement District (BLID) and supported by VLAWMO.

Chair Farrell inquired about the DNR lottery system and grant approval rates and Tanner explained that above 70% of applications were likely funded this year.

Commissioner Nelson inquired about the chemical used for the treatment and Tanner stated that she thought Aquathol will be used. Midwest AquaCare will be conducting the treatment.

VI. Commissioner Reports

None

VII. NOHOA

Patricia Orud said NOHOA completed a beetle release for control of invasive purple loosestrife. Follow-up reports indicate that the beetle population is doing quite well.

Buckthorn and garlic mustard removal was conducted this Spring, 2022 focused on the area around Mary Hill Park. Further buckthorn removal is targeted for the perimeter of Deep Lake. An arbor month event took place on Arbor Day in May, in conjunction with the North Oaks Natural Resources Commission, and 400 trees were given to residents.

VIII. Ramsey Soil & Water Conservation Division

Ann WhiteEagle said the SWCD is looking forward to working with VLAWMO and partners on the WBIF program and thanked Dawn Tanner for her work on the Vadnais Sucker maintenance plan.

IX. St. Paul Regional Water Services

Justine Roe announced St. Paul Regional Water Services (SPRWS) will have an open house July 16-17th from 9-5pm at the Hyland water tower.

She also provided an update that Jim Bode is retiring from SPRWS after 36 years of service. A celebration is occurring on June 16th at 4pm at Crooked Pint and all are invited.

X. Public Comment

None

XI. Next Meetings:

Next TEC meeting July 13th, Next BOD meeting June 22nd.

XIII. Adjourn

It was moved by Commissioner Huntrods and seconded by Commissioner Nelson to adjourn the meeting at 9:09 am. Vote: all aye. Motion passed.

Minutes compiled by Nick Voss.

VLAWMO TEC: Finance Report - July 2022

Jul-22		Actual 7/1/22	Actual to Date	2022 Budget	2021 carry over/Grants	Remaining in Budget	2022 Available	Act vs. Budget
BUDGET #	INCOME							
5.11	Storm Water Utility	\$0	\$440,247	\$1,019,521	\$0	\$579,274	\$1,019,521	43%
5.12	Service Fees	\$0	\$100	\$200	\$0	\$100	\$200	50%
5.13	Interest + mitigation acct	\$541	\$1,144	\$1,500	\$0	\$356	\$1,500	76%
5.14	Misc. income - WCA admin & other	\$322	\$2,198	\$3,000	\$0	\$802	\$3,000	73%
5.15	Other Income Grants/ <u>loan</u>	\$0	\$33,662	\$324,500	\$0	\$290,838	\$324,500	10%
5.16	Transfer from reserves	\$0	\$0	\$192,367	\$133,751	\$326,118	\$326,118	0%
	TOTAL	\$863	\$477,351	\$1,541,088	\$133,751	\$1,197,488	\$1,674,839	31%
EXPENSES								
3.1	Operations & Administration							
3.110	Office - rent, copies, post tel supplies	\$2,169	\$14,785	\$27,097	\$0	\$12,312	\$27,097	55%
3.120	Information Systems	\$1,300	\$13,734	\$25,865	\$0	\$12,131	\$25,865	53%
3.130	Insurance	\$0	\$0	\$7,210	\$0	\$7,210	\$7,210	0%
3.141	Consulting - Audit	\$0	\$7,896	\$8,191	\$0	\$295	\$8,191	96%
3.142	Consulting - Bookkeeping	\$0	\$0	\$1,500	\$0	\$1,500	\$1,500	0%
3.143	Consulting - Legal	\$0	\$296	\$5,000	\$0	\$4,704	\$5,000	6%
3.144	Consulting - Eng. & Tech.	\$1,630	\$19,003	\$30,000	\$14,000	\$24,997	\$44,000	43%
3.150	Storm Sewer Utility	\$0	\$1,242	\$14,000	\$0	\$12,758	\$14,000	9%
3.160	Training (staff/board)	\$0	\$7,735	\$12,500	\$0	\$4,765	\$12,500	62%
3.170	Misc. & mileage	\$240	\$1,523	\$6,300	\$0	\$4,777	\$6,300	24%
3.191	Administration - staff	\$30,144	\$222,987	\$391,400	\$0	\$168,413	\$391,400	57%
3.192	Employer Liability	\$9,326	\$65,705	\$114,425	\$0	\$48,720	\$114,425	57%
3.2	Monitoring and Studies							
3.210	Lake and Creek lab analysis	\$0	\$1,369	\$18,000	\$0	\$16,631	\$18,000	8%
3.220	Equipment	\$16	\$533	\$3,000	\$0	\$2,467	\$3,000	18%
3.230	Wetland assessment & management	\$0	\$0	\$15,000	\$0	\$15,000	\$15,000	0%
3.240	Watershed Plan Amendment	\$0	\$0	\$15,000	\$0	\$15,000	\$15,000	0%
3.3	Education and Outreach							
3.310	Public Education	\$0	\$93	\$6,000	\$0	\$5,907	\$6,000	2%
3.320	Marketing	\$0	\$5,598	\$17,500	\$0	\$11,902	\$17,500	32%
3.330	Community Blue Ed Grant	\$48	\$148	\$2,000	\$0	\$1,852	\$2,000	7%
<i>Total Core functions: Ops, Monitoring, Education</i>		<i>\$44,874</i>	<i>\$362,647</i>	<i>\$719,988</i>	<i>\$14,000</i>	<i>\$371,341</i>	<i>\$733,988</i>	<i>49%</i>

VLAWMO TEC: Finance Report - July 2022

Capital Improvement Projects and Programs								
3.4	Subwatershed Activity							
3.410	Gem Lake	\$0	\$0	\$10,000	\$0	\$10,000	\$10,000	
3.420	Lambert Creek	\$4,014	\$19,193	\$44,432	\$70,000	\$95,239	\$114,432	17%
3.421	Lambert Lake Loan	\$0	\$19,284	\$38,568	\$0	\$19,284	\$38,568	50%
3.425	Goose Lake	\$0	\$19,665	\$70,000	\$10,000	\$60,335	\$80,000	25%
3.430	Birch Lake	\$0	\$4,145	\$10,000	\$0	\$5,855	\$10,000	41%
3.440	Gilf Black Tam Wilk Amelia	\$0	\$31,935	\$93,500	\$12,000	\$73,565	\$105,500	30%
3.450	Pleasant Charley Deep	\$10,518	\$27,072	\$35,000	\$10,000	\$17,928	\$45,000	60%
3.460	Sucker Vadnais	\$0	\$5,618	\$41,500	\$0	\$35,882	\$41,500	14%
3.48	Programs							
3.480	Soil Health Grant	\$0	\$179	\$5,000	\$0	\$4,821	\$5,000	4%
3.481	Landscape 1	\$0	\$0	\$16,000	\$0	\$16,000	\$16,000	0%
3.482	Landscape 2	\$864	\$8,290	\$28,000	\$17,751	\$37,461	\$45,751	18%
3.483	Project Research & feasibility	\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!
3.485	Facilities Maintenance	\$766	\$38,025	\$102,600	\$0	\$64,575	\$102,600	37%
3.5	Regulatory							
3.510	Engineer Plan review	\$0	\$0	\$2,000	\$0	\$2,000	\$2,000	0%
	<i>Total CIP & Program</i>	\$16,162	\$173,406	\$496,600	\$119,751	\$442,945	\$616,351	28%
	Total of Core Operations & CIP	\$61,036	\$536,053	\$1,216,588	\$133,751	\$814,286	\$1,350,339	40%

Fund Balance	6/1/2022	7/1/2022
4M Account	\$417,401	\$352,614
4M Plus Savings	\$324,459	\$324,710
Total	\$741,860	\$677,324

Restricted funds	7/1/2022
Mitigation Savings	\$21,013
Term Series	\$0

Vadnais Lake Area Water Management Organization
Check Detail
 June 9 through July 13, 2022

8:40 AM
 07/01/2022

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Check	eft	06/20/2022	Reliance Standard		Checking - 1987		-316.66
				Insurance Benefit		-90.00	90.00
				Insurance Benefit		-226.66	226.66
TOTAL						-316.66	316.66
Check	5373	07/13/2022	Nicholas Voss		Checking - 1987		-27.44
				3.170 - Misc. & mileage		-27.44	27.44
TOTAL						-27.44	27.44
Check	5374	07/13/2022	Dawn Tanner		Checking - 1987		-107.06
				3.170 - Misc. & mileage		-107.06	107.06
TOTAL						-107.06	107.06
Check	5375	07/13/2022	Brian Corcoran		Checking - 1987		-121.48
				3.170 - Misc. & mileage		-105.30	105.30
				3.220 - Equipment		-16.18	16.18
TOTAL						-121.48	121.48
Check	5376	07/13/2022	Houston Engineering, Inc		Checking - 1987		-1,630.25
				3.144 - Eng. & Tech.		-1,630.25	1,630.25
TOTAL						-1,630.25	1,630.25
Check	5377	07/13/2022	City Of Roseville		Checking - 1987		-1,300.19
				IT Support		-1,300.19	1,300.19
TOTAL						-1,300.19	1,300.19
Check	5378	07/13/2022	Vacker Inc.		Checking - 1987		-864.00
				3.482 - Landscape 2		-864.00	864.00
TOTAL						-864.00	864.00
Check	5379	07/13/2022	Kathy Hellen		Checking - 1987		-48.00
				3.330 - Community Blue Education Grant		-48.00	48.00
TOTAL						-48.00	48.00
Check	5380	07/13/2022	carp solutions		Checking - 1987		-10,517.92
				3.450 - Pleasant Charley Deep		-10,517.92	10,517.92
TOTAL						-10,517.92	10,517.92
Check	5381	07/13/2022	SEH		Checking - 1987		-3,406.95
				1 - LL grant \$302,679		-3,406.95	3,406.95
TOTAL						-3,406.95	3,406.95
Check	5382	07/13/2022	City of Vadnais Heights		Checking - 1987		-2,169.36
				Rent		-1,665.00	1,665.00
				Phone/Internet/Machine Overhea		-295.00	295.00
				Postage		-80.76	80.76
				Copies		-128.60	128.60
TOTAL						-2,169.36	2,169.36
Check	5383	07/13/2022	City of White Bear Lake		Checking - 1987		-39,153.62
				payroll		-30,144.05	30,144.05
				Administration FICA		-2,186.88	2,186.88
				Administration PERA		-2,260.81	2,260.81
				Insurance Benefit		-4,516.96	4,516.96
				Admin payroll processing		-44.92	44.92
TOTAL						-39,153.62	39,153.62
Check	5384	07/13/2022	Kennedy & Graven, Chartered		Checking - 1987		-1,373.10
				LL VLAWMO cash match		-607.20	607.20
				3.485 - Facilities & Maintenance		-765.90	765.90
TOTAL						-1,373.10	1,373.10

Vadnais Lake Area Water Management Organi
Profit & Loss
 June 9 through July 13, 2022

8:47 AM

07/01/2022

Cash Basis

Jun 9 - Jul 13, 22

Ordinary Income/Expense

Income

Misc.	300.00
5.1 · Income	
5.13 · Interest	541.09
5.14 · WCA sub-grant & Misc.	21.61
Total 5.1 · Income	<u>562.70</u>
Total Income	<u>862.70</u>
Gross Profit	862.70

Expense

3.1 · Administrative/Operations

3.110 · Office

Copies	128.60
Phone/Internet/Machine Overhead	295.00
Postage	80.76
Rent	1,665.00

Total 3.110 · Office 2,169.36

3.120 · Information Systems

IT Support 1,300.19

Total 3.120 · Information Systems 1,300.19

3.144 · Eng. & Tech. 1,630.25

3.170 · Misc. & mileage 239.80

3.191 · Employee Payroll

payroll 30,144.05

Total 3.191 · Employee Payroll 30,144.05

3.192 · Employer Liabilities

Admin payroll processing 44.92

Administration FICA 2,186.88

Administration PERA 2,260.81

Insurance Benefit 4,833.62

Total 3.192 · Employer Liabilities 9,326.23

Total 3.1 · Administrative/Operations 44,809.88

3.2 · Monitoring and Studies

3.220 · Equipment 16.18

Total 3.2 · Monitoring and Studies 16.18

3.3 · Education and Outreach

3.330 · Community Blue Education Grant 48.00

Total 3.3 · Education and Outreach 48.00

3.4 · Capital Imp. Projects/Programs

3.420 · Lambert Creek Restoration

LL VLAWMO cash match 607.20

1 · LL grant \$302,679 3,406.95

Total 3.420 · Lambert Creek Restoration	4,014.15
3.450 · Pleasant Charley Deep	10,517.92
Total 3.4 · Capital Imp. Projects/Programs	<u>14,532.07</u>
3.48 · Programs	
3.482 · Landscape 2	864.00
3.485 · Facilities & Maintenance	765.90
Total 3.48 · Programs	<u>1,629.90</u>
Total Expense	<u>61,036.03</u>
Net Ordinary Income	<u>-60,173.33</u>
Net Income	<u><u>-60,173.33</u></u>

Vadnais Lake Area Water Management Organization
Custom Transaction Detail Report
 May 1 through July 1, 2022

8:38 AM

07/01/2022

Accrual Basis

Type	Date	Num	Name	Memo	Account	Clr	Split	Amount	Balance
May 1 - Jul 1, 22									
Credit Card Charge	05/02/2022		Prairie Moon Nursery	seed	US Bank CC	√	3.220 · Equipment	34.00	34.00
Credit Card Charge	05/04/2022		L.L. Bean	jacket for lauren	US Bank CC		3.320 · Marketing	254.85	288.85
Credit Card Charge	05/09/2022		adobe *photography plan		US Bank CC	√	Software	9.99	298.84
Transfer	05/20/2022			Funds Transfer	US Bank CC	√	Checking - 1987	-647.58	-348.74
Credit Card Charge	05/26/2022		Prairie Restorations	seed for 4th & Otter	US Bank CC	√	3.320 · Marketing	871.00	522.26
Credit Card Charge	05/26/2022		Adobe "Creative Cloud		US Bank CC	√	Software	32.20	554.46
Credit Card Charge	06/03/2022		Google*SVCAPPS_VLAWM		US Bank CC	√	WEB	42.00	596.46
								596.46	596.46
May 1 - Jul 1, 22									

TEC Staff Memo – July 13th, 2022

IV. Administration & Operations

A. Financial Report for July & Authorization for Payment

Please find the July 2022 Finance Report attached in the ePacket for review and approval.

V. Programs

A. Education and Outreach Program

Staff will present the attached powerpoint at the July 13th TEC meeting. The presentation will include updates on the Bridgewood Raingarden and current partnerships with the Vadnais Heights Parks Commission.

VI. Projects

A. Update on RWMWD’s request for Boundary change in West Vadnais Lake Drainage Area

At the June 22, 2022 meeting the VLAWMO Board of Directors approved a motion identifying approval of a motion of support related to RWMWD’s request for Boundary change in West Vadnais Lake Drainage. Specifically the motion included that VLAWMO would support the RWMWD requested boundary change process pending :

1. City support of the process
2. That this motion does not prevent VLAWMO Board’s future consideration of the required formal boundary change concurrence resolution (but does provide for a preliminary indication of support of starting the process)
3. RWMWD files petition and administers process.

Staff will be presenting the attached powerpoint slides to provide an update to the TEC on this topic and explain anticipated next steps in the process.

B. Update on Whitaker Biochar project

At the June 22, 2022 meeting the VLAWMO Board of Directors approved the below motion:

“Director Youker moves and Director Watson seconds to approve the Biochar project plans and specifications dated June 14, 2022 with non-material changes and directs the solicitation of quotes for project construction. Furthermore the Board also approves the License agreement with White Bear Township with non-material changes and upon advice of Counsel and authorize the Board Chair and Board Secretary to Sign.”

Staff will be presenting the attached PowerPoint slides (Attachment 1) to provide an update to the TEC on this proposed project and explain anticipated next steps in the process.



Bridgewood Park Raingarden

“Points for the Watershed”

V. A. 1.

Nick Voss
VLAWMO TEC

7/13/22



Bridgewood Raingarden Kick-off Party

There's a new raingarden in town!

See how it's built and hear how it benefits downstream waterbodies such as East Vadnais Lake.

Free event
RSVP by July 6th @VLAWMO.org/events
 Parking lot reserved for event goers, street parking overflow
Back-up day in the case of bad weather: August 18th

July 12th, 2022

6:00-7:30 PM
Open house style

Bridgewood Park:
4224 1/2 Bridgewood Terrace, VH MN 55127

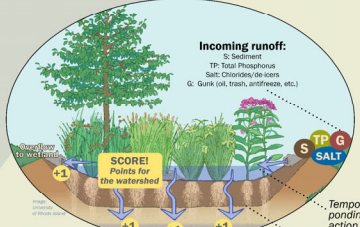
- Tour the new raingarden
- Family-friendly education activities
- How to plant for pollinators by season - *Master Gardener Talk*
- Snacks and refreshments

Vadnais Lake Area Water Management Organization



Bridgewood Park Raingarden

This raingarden is a tool to capture and treat stormwater runoff. It benefits the City of Vadnais Heights by reducing stress and demand on the local drainage system. With each raingarden built, runoff travels less distance, cutting down on sediment, nutrients, and things like road salt that make their way into ditches and wetlands. This supports efficient ditches, better water storage, healthier wetlands, and cleaner lakes.



The robust root structures of the garden's native sedges and perennials can handle large rainfalls and even drought.



Points for the watershed:

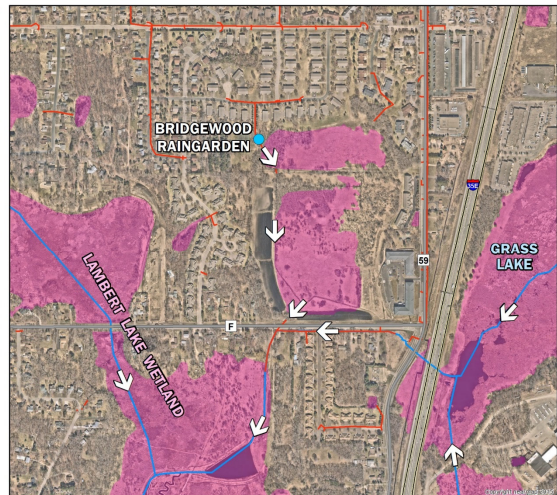
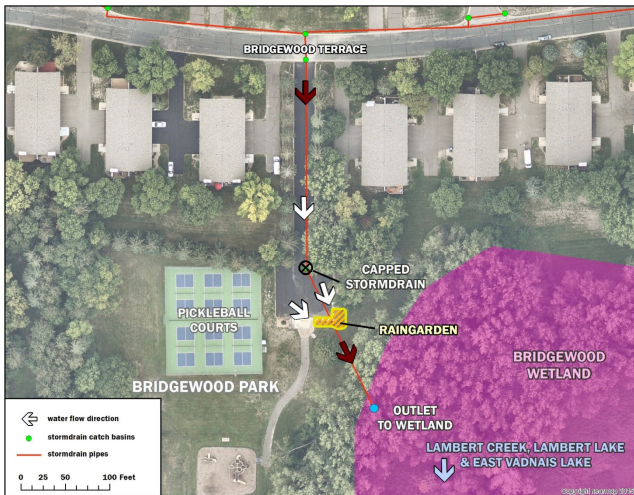
Minimal Impact Design Standards (MIDS) are used to estimate the raingarden's results for Lambert Creek and East Vadnais Lake. Each year, this raingarden:

- Stores **4,643 bathtubs of stormwater**, or 1 football field about 1/2 ft deep.
- Removes **85 lbs of sediment** from washing into the wetland and creek.
- Removes **.47 lbs of total phosphorus** (1 lb of TP can create 500 lbs of algae!).

See more projects like this and learn about how to help take care of Mother Earth at www.vlawnw.org.



Vadnais Lake Area Water Management Organization



Vadnais Lake Area Water Management Organization



Vadnais Lake Area Water Management Organization

A rain garden on paper



Best Management Practices and the MS4:

Municipal Separate Storm Sewer System
Minimum Control Measures (MCM) 1, 2, and 6

MS4 General Permit requirements:

12.8, 12.9, 14.2, 16.3, 20.12, 20.16, 21.3 (g, i), 21.9,
21.11, 21.13, 22.2, 22.4 (e), 25.3, 27.6, 27.19, 27.38

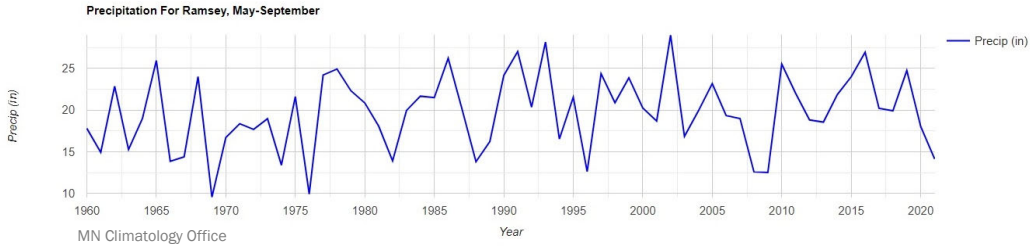


Vadnais Lake Area Water Management Organization

Water levels



Best Management Practices and high water



Vadnais Lake Area Water Management Organization

Water levels



Best Management Practices and high water

Watershed management is a blend of small and large scale, preventative, and corrective approaches.



Repair infrastructure
Koehler Road Bank Restoration



Enhance existing infrastructure
Lambert Lake Pond and Meander



Maintain existing infrastructure
Lambert Creek Dredging

Vadnais Lake Area Water Management Organization

Water levels



Best Management Practices and high water

Watershed management is a blend of small scale, large scale, preventative, and corrective approaches.



Create new storage
Vadnais Heights Fire Dept. Rain garden



Create new storage
Bridgewood Rain garden



Create new storage
Central Middle School Bioswale

Vadnais Lake Area Water Management Organization

Talking points



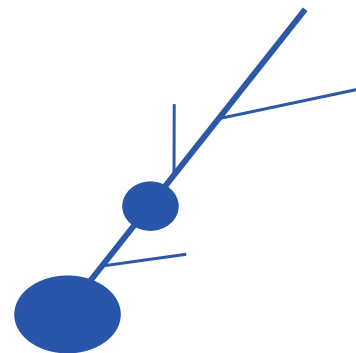
“Restoring the pipeshed”

Most of the built environment was designed to usher water “away,” but this approach always has consequences somewhere else.

In an unbalanced watershed, water impacts residents and businesses in an unbalanced way.

Restoring the watershed means taking a system of pipes and ditches and helping it perform more like the historic water cycle.

Slow it down, soak it up, spread it out.



Vadnais Lake Area Water Management Organization

Talking points



“Building a balanced watershed”

A balanced watershed includes water storage and velocity reduction upstream, downstream, and in-between.

“Green infrastructure is active and dynamic”

Minnesota has lost over half of it's historic wetlands. Like wetlands, raingardens, bioswales, and retention basins are a key place for surface and groundwater to connect.

Green infrastructure has many contributing solutions.



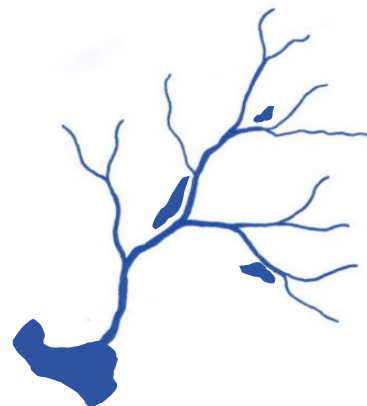
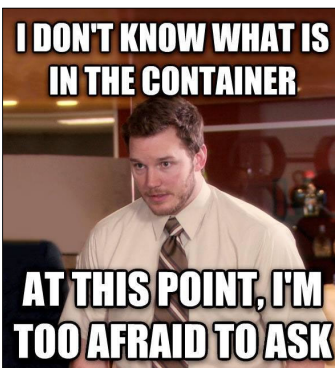
Vadnais Lake Area Water Management Organization

Talking points



“Green infrastructure is active and dynamic”

Green infrastructure is like a refrigerator: Frequent, ongoing checks and maintenance avoid a headache later on.



Vadnais Lake Area Water Management Organization

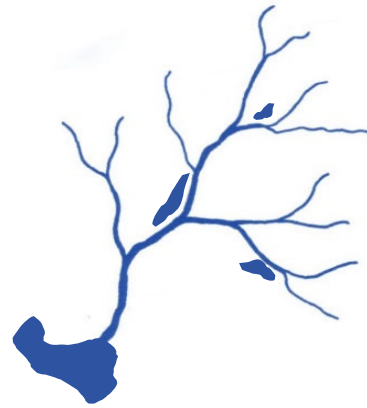
Talking points



“Pre-rinse”



Shutterstock Royalty Free



Vadnais Lake Area Water Management Organization

Salt and Turf Tools

V. A. 2.

Nick Voss
VLAWMO TEC
7/13/22



Winter maintenance



Smart Salting:

Level 1, 2

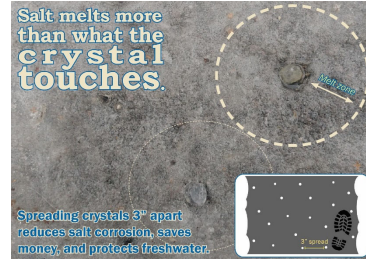
Property managers

Local leaders and officials

Salt Symposium (August)

Education:

Flyers, mailers, and infographics



Vadnais Lake Area Water Management Organization

Winter maintenance



Smart Salting:

Level 1, 2

Property managers

Local leaders and officials

Salt Symposium (August)

Education:

Flyers, mailers, and infographics



Vadnais Lake Area Water Management Organization

Summer maintenance



Routines, communication, and training:

- MPCA turf maintenance best practices
- BMP inspection and maintenance training
- Demonstration projects (VLAWMO cost-share program)
- Emerging programs: Sustainable Landcare Academy



Building convenience:

- Easy and convenient MS4 permit compliance



Vadnais Lake Area Water Management Organization

Balancing the workload



Turf Maintenance Matrix (MPCA)

- Designating high to low priority areas with a range of groundcovers
- Integrate specialized green infrastructure in a balanced way (i.e. raingardens, native plantings)
- Intentional approach to resource inputs: Fertilizer, labor, groundwater, etc.

BEST PRACTICES MATRIX		2 of 20
Turfgrass Quality Expectations:	<p>MINIMAL: Minimal quality lawns are dominated by typical cool season lawn grasses. They are mowed at higher heights throughout the year, clippings returned, no supplemental irrigation provided – some browning to summer dormancy allowed, little to no weed control except to keep weed levels to less than 50% of the lawn surface.</p> <p>AVERAGE: Average quality lawns are dominated by typical cool season lawn grasses. They may be mowed at different heights depending upon time of year and use, clippings returned, irrigation may or may not be provided, and some weed control is provided, but some weeds are tolerated.</p> <p>HIGH: High quality lawns are dominated by Kentucky Bluegrass. They are mowed at different heights depending upon time of year and use. They may be mowed more frequently and are regularly irrigated. Weeds are controlled so that very few weeds exist.</p>	

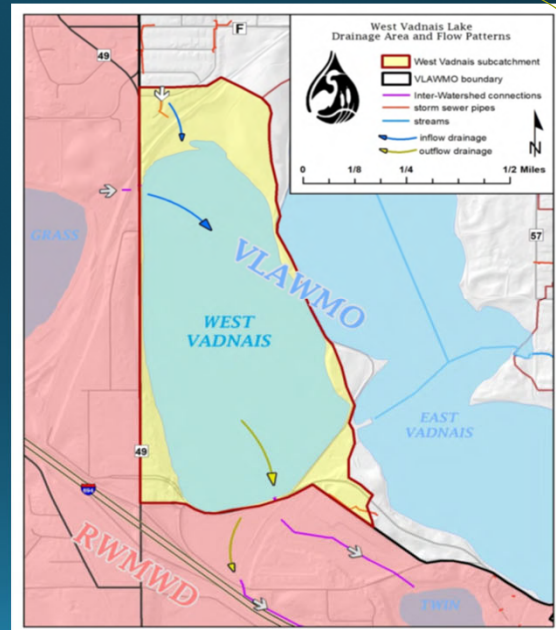


Vadnais Lake Area Water Management Organization

VI. A.

Update on RWMWD's Request to Pursue Boundary Change for the West Vadnais Lake Drainage Area

**July 13, 2022
VLAWMO TEC meeting**



Background

- At the May 11, 2022 TEC meeting, Chair Farrell updated the TEC on the proposed watershed political boundary change request from RWMWD for West Vadnais Lake drainage area.
- The proposal to switch West Vadnais drainage area from VLAWMO to RWMWD was stimulated by the RWMWD board.
- Both the City of Vadnais Heights' City Council and VLAWMO Board would need to approve the boundary change for it to be implemented.

Background

- From a technical standpoint, West Vadnais Lake is currently within VLAWMO's political boundary, but it is within RWMWD's hydrologic boundary.
- the vast majority of the runoff delivered to West Vadnais Lake are coming from a different watershed, and the outlet to the lake is also a different watershed.
- VLAWMO would likely bear some of (most?) the cost of implementing future in-lake management and the TMDL planning with the current political boundary
 - "Protecting" Investment of a possible alum treatment given it will not be directly managing watershed loadings. Who pays?
 - The management of the in-lake water quality is linked to upstream and downstream water management (VLAWMO doesn't/will not manage).

Recent Board Discussions Since the last TEC update

- On April 20, RWMWD President sent a letter to the VLAWMO Board summarizing the requested RWMWD management/maintenance costs in the W. Vadnais drainage area and Summarized RWMWD's rationale for boundary change.
- Per subcommittee request, VLAWMO, City staff and RWMWD attended the May 3 and May 17 City council workshop meetings to discuss this topic with the Council. At the May 17 workshop meeting, the council members provided initial support to start the boundary change petition process.
- At the June 6 VLAWMO Subcommittee meeting VLAWMO and RWMWD staff responded to follow-up questions from the May 17 City workshop. Upon further discussion the subcommittee reached consensus on a recommendation of initial support to start the boundary change process and provided that recommendation to the to the full board for consideration at the June 22 VLAWMO Board meeting.

VLAWMO Board Action from the June 22, 2022 VLAWMO Board meeting

approved staff responding to RWMWD's April 20, 2022 letter by identifying that VLAWMO would support the RWMWD requested boundary change process pending :

1. City support of the process
2. That this motion does not prevent VLAWMO Board's future consideration of the required formal boundary change concurrence resolution (but does provide for a preliminary indication of support of starting the process)
3. RWMWD files petition and administers process.

Possible Next Steps

- RWMWD Board considers responses from the VLAWMO and City
- RWMWD decides to pursue MS 103B.215 Boundary change process and requests the VLAWMO Board and City Council for formal concurrence of boundary change.
- RWMWD submits petition to BWSR with local concurrences and BWSR publically notices proposed action
- BWSR would then consider after noticing period if petition in order and agrees with request.

Agenda Item VI. B.

Attachment 1

Plans and Specs., License Agreement with Township, and Authorization to Solicit Quotes for Biochar Project

July 13, 2022
VLAWMO TEC Meeting



Background- Biochar Project At Whitaker Pond

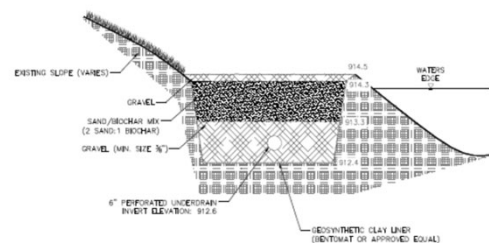
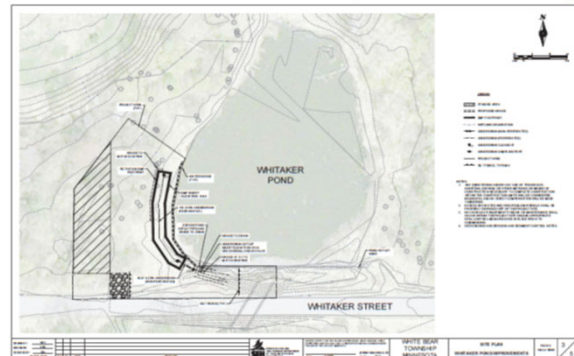
- At the February 2022 Board meeting staff presented background related to relocating the proposed Biochar project from the Lambert site (deemed by SEH not feasible) to the Whitaker Pond site
- Board approved the scope of services for engineering design services with SEH for final design and development of plans /specs. For the Biochar Project at Whitaker Pond.
- Since February 2022 Board meeting:
 - SEH has completed final plans and specs
 - In close coordination with VLAWMO attorney, staff coordinated with WB Township staff and Township board to obtain approval of license agreement for project construction access and maintenance access
 - WCA Process has been completed
 - Board Approved Project Plans, specs, agreement and solicitation of quotes

Financial background

- Proposed project budget
 - \$59,175 grant dollars (319 grant)
 - \$33,000 BWSR 21-23 WBIF grant as local match
 - The local match amount needed is included in the approved VLAWMO 2022 budget for Lambert Creek Subshed (\$70,000)
- Total budget available : \$162,175
- Board approved (Feb 2022) scope of services with SEH for engineering design: \$34,175
- Apx. Budget remaining: \$128,000
- Based on SEHs Engineering's estimated cost for construction and inspection services as provided as part of the final design, the Project is anticipated to be below this total budget remaining

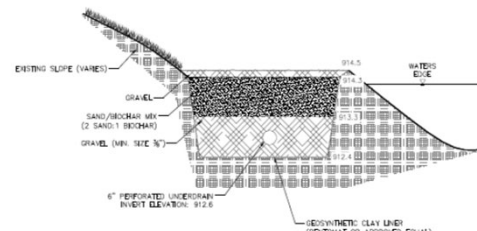
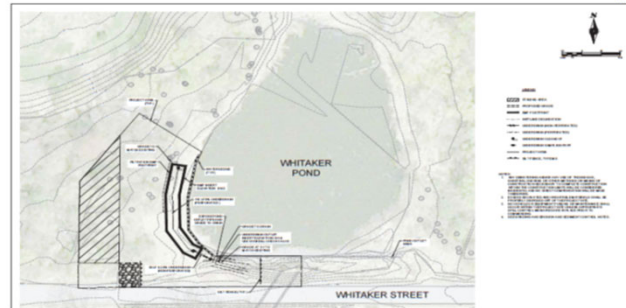
Overview/Summary of proposed Plans and Specs.

- Project will run along the west edge of Whitaker Pond in White Bear Township.
- Project will be an 1800sqft BMP roughly 15ft wide and 120ft long.
- Water from the pond will “bounce” into the bench and filtrate through the medium and into the subsurface drain.
- Subsurface Drain with clean outs (2) and a water quality sampling port



Overview/Summary of proposed Plans and Specs.

- Access via Whitaker Street
- City of White Bear Lake has allowed for mixing the Biochar /Sand to take place at one of their public works yards
- Dewatering of the Pond
- Includes a project completion date of December 31, 2022



Overview of License Agreement with WB Township

- A license agreement has been drafted by VLAWMO legal counsel between VLAWMO and the Township for access and use of Township property for the project.
- Provides for right for access for construction and for necessary maintenance of the system for the required 10 years.
- Township approved license agreement at the June 6, 2022 Township Board meeting.
- Contractor is responsible for obtaining necessary permits from Township

Next steps and anticipated schedule

- Work with Township on communication on project to residents
- Evaluate quotes and Board consider construction contract (August Board Meeting)
- Construct Project
- Monitor during year following completion

- Anticipated construction schedule: Fall/Winter 2022